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IKE KUUNA LIMU: LEARNING ABOUT HAWAII'S LIMU

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NO KUU LEI PAKALANA NANA I KAKOO
A PAIPAI NUI MAI IAU MA KEIA PAHANA NUI.

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ABSTRACT

Limu, especially the edible marine algae, play an important part in Hawaiian culture. Limu has nutritional, spiritual, and social value for Hawaiians. Over 200 different Hawaiian names of limu have been documented. Positive scientific identification for most of these names, however, is lacking. By meeting and talking with a variety of limu-knowledgeable peoples, a great deal of information was recorded. Positive identifications as well as uses for some of these limu have been documented and recorded as a resource for future generations. The limu database, constructed as a part of this research, contains information from published sources, audio and video recordings, and personal interviews conducted for this thesis. This database should be considered a launching point for future research and not a completed work. It is expected that the work will continue as new generations learn more and more.

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PREFACE

Choosing to write a paper about limu was never something that I dreamt about. How I got to this point in my life is cumulative and not very easy to explain.

I learned from a young age, admiring my grandparents, parents, and older brother that hard, outdoor work is very rewarding. Something about working on the land just felt right, like coming home. I took up Hawaiian language in high school and continued in college at U.H. Hilo even though I was aiming for a business degree. Hawaiian came easy to me and it, too, somehow fit. While being bored to death by my economics classes, a required core class captured my attention. Botany 153 taught by Dr. Don Hemmes focused an instinctual love for nature to an excitement about plants. I had already realized that business was not my bag and I would eventually go on to graduate with degrees in Hawaiian Studies and Natural Sciences with a minor in Biology.

I entered graduate school at U.H. Mānoa only because my wife was going to pursue her masters on O`ahu. Botany

was the obvious choice because of my passion for Hawaiian plants and my knack for botany as a science. The class that set me in the direction of learning about limu was a phycology class taught by Dr. Celia Smith. Though an excellent class about Hawaiian algae, it was what was lacking from that class and the general field of phycology that challenged me towards studying limu. I was learning about hundreds of species of Hawaiian algae, only a few dozen of which I could confidently call by a Hawaiian name (thanks entirely to the ethnophycological studies conducted by Dr. Isabella Aiona Abbott). However, I began to take notice, especially from Pukui's Hawaiian Dictionary, of an abundance of Hawaiian limu names with little to no description and no recorded positive identification. There was my task.

I eventually migrated to the sixth floor of the St. John Plant Science Building to be closer to the local students who congregated in some lab space up there. Of course, Dr. Abbott was also located on the sixth floor and in fact, is the main reason why these students were up

there in the first place. She, being a Hawaiian, had converted these students to psychology, and so I had just moved into "Limu Grand Central." Everything was in place, and it was only a matter of time before I, too, found myself floating in the world of ethnopsychology.

Throughout the years, whether it be planting sweet potato on the farm as a young boy, to conversing in Hawaiian as a high school teen, to participating in retreats in Waipi'o Valley as a young adult in college, there were defining times that fueled the eternal fire inside of me to design my future by pursuing the past, my heritage. It's kind of like those stories of taking troubled Hawaiian teens and putting them in a Hawaiian environment, traditional sailing or in the taro patch, and watching them flourish and excel. Whether it's spiritual, guidance from the unseen, or it's just a knack we have, Hawaiians are drawn to their heritage. Why am I writing a paper about limu? I say it's because I'm Hawaiian.

There is a dark side to this story as well. It has to do with an internal struggle and is part of the reason why

it's year 2003 and I'm still doing something I started in 1998. It has to do with the clash that sometimes occurs between scientific methods and Hawaiian culture, between indigenous property rights and the power that comes with the culturally inconsistent use of this knowledge, and the incompatibility between some parts of western and traditional cultures. Above all of these issues, however, was my own personal culture and my fear of writing something that was wrong, or incomplete, or arrived at in a culturally inappropriate way, or just culturally unacceptable altogether. There were and are still times when I feel like I shouldn't have embarked on this process and that I shouldn't submit this paper as a thesis for fear of what the repercussions might be. I don't know what the value of this work will be for others, but I do know that it was the process from which I learned the most. Having said all of this, I hope the reader has gained a little insight into my feelings about this paper and that it will be taken, like most things should be, with a grain of salt.

CHAPTER 1: INTRODUCTION

Goals

There are a few main goals for this research. The first is to review the literature and compile a comprehensive database of Hawaiian *limu* names from various sources. This database will provide a foundation of knowledge to which I will add new names and information. This database can prove a valuable resource for people interested in Hawaiian *limu* names and uses.

The second goal of this research is to meet with and learn from people who have knowledge of Hawaiian *limu* names and uses. Documenting this information will add information to the existing base and shed new light on contradictory records. With sound ethnobotanical methods, *limu* names and the sources of these names can be linked to *limu* specimens.¹

To understand, appreciate, and perpetuate culture it is essential to learn from living people, not just from

¹ The value of this research lies in the permanent documentation of "new" *limu* information, such as names, identification, and uses that have never been documented before. From one generation to the next there is a loss of information. Documenting this information before it is "taken to the grave" is a desperate mission that is being undertaken in many cultural disciplines.

historical records. By learning about *limu* from these people, I will be able to perpetuate my culture by identifying, gathering, and preparing *limu* for my own family.

Hypotheses

1) There are still people remaining who can recognize and identify many Hawaiian *limu*.

2) Categories of *limu* knowledge that still exist include (not exclusively):

- a. Hawaiian names of *limu*
- b. Uses of *limu* (edible, medicinal, ceremonial, none, etc.)
- c. Collection and preparation methods
- d. Conservation practices
- e. Distributions (past and present)
- f. Myths, folklore, interesting anecdotes, etc.

3) People from different areas will have a varying range of *limu* knowledge consistent with their home area.

4) There are people who have in the past and who currently still cultivate *limu*.

CHAPTER 2: *LIMU* STUDIES IN HAWAI`I

What is *limu*?

"*limu*. 1. A general name for all kinds of plants living under water, both fresh and salt, also algae growing in any damp place in the air, as on the ground, on rocks, and on other plants; also mosses, liverworts, lichens. See saying, *hailepo. Ua ulu ka limu*, the seaweed (pubic hairs) are growing. (PPN *limu*.) 2. vs. Tricky, deceiving, unstable (said to be named for the octopus' ability to change its color, and its waving of a tentacle to and fro like the motion of a seaweed in water). 3. n. Wind gust. *Rare*. 4. n. Coil, curl. *Rare*. 5. n. Soft coral" (Pukui & Elbert 1986).

The term *limu* is considered the general name for aquatic to semi-aquatic life forms with a similar shape or form. For distinct *limu* with utilitarian properties, another specific name is applied in order to better distinguish between the vast amount of life forms that fall under the heading of "*limu*." This second name is usually a descriptive adjective (i.e., *limu wāwae`iole* or "rats foot" *limu*) or sometimes a suffix to the contracted form of *limu* which is "*li-*" (i.e., *lipepeiao*, *limu pepeiao*, or "ear" *limu*) (Pukui & Elbert 1986, Reed 1907). This system, for

the most part, is not different from the modern scientific system of binomial nomenclature which uses a generic name and a specific epithet (Doty 1957). As expected, this is not an uncommon system for cultures to classify and name their plants (Berlin 1992). When explaining to children this common and natural process of naming plants, I like to compare it to giving our children two names, a last name that perpetuates the relationship to the family and a unique name that sets the child apart. Except for the occasional "junior" this is usually a well-received analogy.

Studies of Hawaiian *limu* names

In comparison to the numerous scientific studies done on Hawaiian marine algae (see Abbott 1999), there are relatively few that have concentrated on the Hawaiian names and/or ethnobotanical uses for these *limu*. These studies are reviewed below in chronological order of publication.

Charles Gaudichaud (1826) was the first to publish information on Hawaiian algae. During his visit to the

islands he recorded the words *rimou* (*limu*), *pacaya*, *ouri*, and *rimou-kala* with Latin names for the last three.²

Interestingly, his spelling of the words reflects an older version of the Hawaiian language that he encountered (where a "Hawaiian 'r'" is used in the place of a more contemporary 'l').

Lorrin Andrews' dictionary (1974) which was first published in 1865 provides a list of Hawaiian *limu* names under the term *limu*. This list is made up of 26 names without any descriptions.³ Included within the definition of *limu* is the interesting statement that Hawaiians "class the *limu* among fish."⁴

² Listed in Appendix A under SOURCE: Gaudichaud

³ Listed in Appendix A under SOURCE: Andrews

⁴ Definition of *limu* can be found in the Appendix under the heading *LIMU* NAME: *limu* and SOURCE: Andrews. This statement is corroborated by the following riddle: "*Ku`u wahi i`a `a`ole ona na`au, a he keu na`e kona ola, a `ono ke `ai `ia, a makemake nui `ia e nā ali`i a me nā maka`āinana. Ka limu.*" "My little fish without entrails, but alive, is very good to eat, and is greatly desired by chiefs and common people. The seaweed." (Judd 1930). The phrase "*`ai me ka i`a*" is the Hawaiian analogy of the English phrase "meat and potatoes." *`Ai* which refers to *poi* or *kalo* (*Colocasia esculenta*) and *i`a* which literally means fish but refers to just about anything that is eaten with the *poi* or *kalo*. Using this general theme, many food products may also be classified with *i`a*.

J. E. Chamberlain published a paper in 1881 which gave a list of 64 Hawaiian names.⁵ This list was taken from Andrews' dictionary and "other sources" which are not named. These names, as the ones provided by Andrews, do not include descriptions or Latin names.

Josephine Tilden (1905) published a paper about her adventures collecting algae in Hawai'i. Within this paper she mentions two Hawaiian names, aalaula and kala along with Latin names for both.⁶

Dr. William Setchell of the University of California published a paper entitled "*Limu*" in 1905. This account is based on his visits to several areas in the islands and informal interviews with several Hawaiian informants. He compiled an annotated list of 106 Hawaiian *limu* names.⁷ Included within this list of *limu* are some descriptive information, meanings of names, notes on usage, and the sources who provided him the information. This publication

⁵ Listed in Appendix A under SOURCE: Chamberlain.

⁶ Listed in Appendix A under SOURCE: Tilden.

⁷ Listed in Appendix A under SOURCE: Setchell.

includes Latin names for certain *limu*, though no voucher specimens are cited.

Minnie Reed, a teacher at the Kamehameha Schools, published her three year study of *limu* in 1907. She mainly collected her information through friends, students, and informal interviews with people at markets and beaches. Through these acquaintances she was able to accumulate specimens of many different types of edible *limu* with their Hawaiian names. Scientific determinations of the specimens were made by herself and by Dr. Setchell. In all, she identified a total of 70 species of algae under the category of edible *limu*.⁸ She recognized that "not more than forty are in general use" and "the other thirty or thirty-five are used only by a few people in certain small areas where they are found in limited quantities." These numbers are probably conservative given Reed's statement that "almost every kind of seaweed that could possibly be eaten was used for food by some Hawaiians." (Reed 1907) Abbott

⁸ Although referred here as 70 distinct species, subsequent taxonomic work has renamed and reclassified many of these taxa. These 70 names are listed in Appendix A under SOURCE: Reed.

(1992) agrees that Hawaiians, out of all Pacific islanders, ate the most diverse range of *limu* species.

Dr. Vaughan MacCaughey of the College of Hawai'i compiled two annotated lists of Hawaiian algae in 1918. While these lists of Hawaiian genera did not specifically aim to record ethnobotanical data, Hawaiian names and some information were provided for 33 economically valued *limu*.⁹ He recognized this exclusion of ethnobotanical data and did not intend for his list to be complete in any regard.

D. M. Kaaiakamanu and J. K. Akina were two employees of the Board of Health who compiled information on the Hawaiian medicinal values of plants. First published in 1922, this collection includes 20 *limu* entries, 10 of which are seaweeds, and the remaining 10 are either freshwater algae, mosses, liverworts, or lichens.¹⁰

Marie Neal (1930) produced a study on Hawaiian marine algae that did not focus on Hawaiian names or

⁹ Listed in Appendix A under SOURCE: MacCaughey.

¹⁰ Listed in Appendix A under SOURCE: Kaaiakamanu.

ethnobotanical uses. However, she did report 20 Hawaiian names with corresponding Latin names.¹¹

In 1940, Dr. E. S. Handy published the first volume of *The Hawaiian Planter*. This book, though it focused on Hawaiian terrestrial horticulture and ethnobotany, did include a ceremonial use and a riddle for *limu* kala.¹²

Dr. Isabella Abbott published a study on brackish-water algae in 1947. Within this study, she reports the Hawaiian names of five *limu* along with the Latin generic names.¹³

Harvey Miller produced a document that remains unpublished but can be found at the Bernice Pauahi Bishop Museum (1951). His study is basically a literature review that compiles Hawaiian *limu* names and corresponding Latin names when available. This compilation drew from 12 published resources and has been a great help to me in my efforts of continuing this type of research.

¹¹ Listed in Appendix A under SOURCE: Neal.

¹² This ceremonial use and riddle is included in Appendix A under SOURCE: Handy.

¹³ Listed in Appendix A under SOURCE: Abbott 1947.

Not long after Miller, Dr. Maxwell Doty put out his own compilation of Hawaiian *limu* names with Latin counterparts (1957).¹⁴ He stated that many of the scientific names cited had changed, even at that time. His compilation drew from nine published resources, all of which are included in Miller's study.

In 1974, Dr. Isabella Abbott published an ethnobotanical study of *limu* (revised in 1996). Abbott reviewed the lists prepared by Reed and Doty, and found that perhaps 63 are indeed algae and thought to be edible. Of these 63, she narrowed the number of edible *limu* which can be determined consistently by the Hawaiian and Latin name to 29. Her study concentrated on 14 of the most common edible *limu* during that time.¹⁵ Abbott (1996) reported different categories of *limu* that are based on the experiences of her mother's and those of other informants. The categories are distinguished as follows: 1) *limu* with a common name that are known and can be identified, 2) *limu* without a common name that are edible (the name is lost

¹⁴ Listed in Appendix A under SOURCE: Doty.

¹⁵ Listed in Appendix A under SOURCE: Abbott.

perhaps), and 3) *limu* without a common name and not edible, or *`ōpala* (rubbish).

From the Henriques-Peabody (date unknown) collection housed at the Bernice Pauahi Bishop Museum, comes an unpublished document titled "Names of Hawaiian birds, shore fauna, and seaweeds." This list contains 44 Hawaiian *limu* names with no other information.

Lastly, a somewhat enigmatic resource exists as an old cardboard box that contains over a hundred 8X5 index cards, on which are hand-recorded Hawaiian *limu* names, sources of information, and some other information. They do not reference any Latin names. These cards are the compilation of Dr. Elizabeth Woust Brown a former professor at the College of Education, University of Hawai`i at Mānoa. They now rest on the corner of Dr. Abbott's desk at the University of Hawai`i at Mānoa.

Gathering *limu*¹⁶

It is generally recognized that in Hawai'i, older women are the knowledgeable bunch when it comes to *limu* matters (Chamberlain 1881, Setchell 1905). This is true because *limu* gathering is generally done by women who wade out into the water when the tide is low (Reed 1907, Setchell 1905).

Limu gathering is done in various ways depending on the type of *limu* and where and how it grows.¹⁷ *Limu* gathering was generally done by women and children, except when extra help was needed to reach the *limu* in rougher, deep waters (Reed 1907). They could often be found wading out on the reef flats in the low tide, gathering the desired *limu* (Abbott 1992, Reed 1907). While gathering *limu*, bits of undesirable *limu* were separated and discarded along with any adhering bits of grit or sand (Reed 1907). The remaining desired *limu* were put into sacks, pails, or

¹⁶ Information presented here reflects the observations and experiences of those who published papers. It is also important to remember that information reflects slices of time in which they worked and not necessarily the pre-contact era.

¹⁷ Abbott (1996) provides brief descriptions of collecting methods for 14 commonly eaten species of *limu*.

any other kind of suitable receptacle (Reed 1907). Some *limu* detaches from the substrate¹⁸ and is easily collected when floating in the water or cast ashore in the drift (Abbott 1996, MacCaughey 1916, Reed 1907).

In the instance where a boat was needed, a group of women and men would go out and the women would collect while the men would fish.

Certain *limu* that remain attached to the substrate require a more active form of gathering, which brings up an interesting question. That is, which is (are) the proper method(s) of collecting attached *limu*? Reed (1907) reports that sharpened iron scraps or old knives were used to "scrape the seaweed from the coral or rocks." This would be especially true for *limu uaualoli*, *limu kohu*, *limu aalaula*,

¹⁸ In my experiences, certain localities tend to have a specific set of *limu* that are stirred up by the oceans actions and are washed ashore in the drift. While it is obvious that this phenomenon is dependent on the types of *limu* that grow in each locality, there are other factors that are involved. For example, at two different beaches that both have *limu kohu*, I have seen it in the drift at one of the beaches but never in the drift at the other. I believe that local currents, wave action, and underwater topography are a few reasons why drift content can vary so much between localities that have the same *limu*. This makes it hard to group *limu* into general categories of drift-collected *limu* and attached *limu*. In order for this to be done properly, it must be done on a location by location basis.

limu lipoa, *limu luau*, *limu akiaki*, and *limu lipeepee*, whose holdfasts are especially strong (Reed 1907).¹⁹ Abbott's (1996) report concurs that *limu lū`au* (*Porphyra vietnamensis* Tanaka et Pham, Reed - *limu luau*) does require scraping from the rock substrate, but differs when it comes to the collection of *limu kohu* (*Asparagopsis taxiformis* (Delile) Trevisan). Abbott reported that "'seed' is left by Hawaiians by never taking the creeping portions." In an interview conducted by Mary Kawena Pukui with a few women (Winifred Sanborn, Alice Aki, and others) about the *limu pakeleawa`a* (*Grateloupia filicina* (Lamouroux) C. Agardh), they emphatically stated that one should not uproot *limu* during gathering as it is considered "*hana`ino*" or careless mistreatment (Pukui 1960). It is unclear if this attitude was reflecting the specific collections of *limu pakeleawa`a* or general *limu* gathering practice.

From the same interview, it was also brought forth that during her menstrual period, it was forbidden for the

¹⁹ The spelling of these *limu* are as found in Reed's treatise. Scientific names were not included due to the numerous taxonomic changes that have since occurred. Appendix A provides taxonomic and additional information extracted from each source.

woman to enter the ocean, thus restricting her from gathering *limu* ("pe`a ka wahine... haumia... `a`ole komo i ke kai").

Preparing *limu*

As expected, preparation varies greatly from one *limu* to the next. Adding to this variation are the preferences of people from different areas. Despite this variation, the literature reports a fairly uniform method for cleaning and preparing *limu*.

After the collection of *limu*, thoroughly washing off the sand, grit and bits of coral becomes the priority. The first washing is usually done at the beach in salt water (Abbott 1992). Having watched Hawaiians clean *limu*, I feel the need to comment on the meticulous nature in which this process is executed. Not a tiny grain of sand or the smallest fragment of undesirable *limu* escapes segregation.

Reed (1907) agrees that washing the *limu* immediately after collection is done very carefully.²⁰

The second washing is usually done at home in fresh water (Abbott 1992). Reed (1907), however, reports that certain *limu* do not fare well with fresh water cleaning, which would result in "injuring the flavor," and "very rapid decay." These *limu* include *limu oolu*, *limu lipeepee*, *limu lepeahina*, *limu moopuna-ka-lipoa* and possibly some others. One of Setchells (1905) informants also categorizes *limu* into those that can be stored for extended periods of time (one year or longer) and others that are considered "one day *limu*." The latter *limu* must be eaten the day they are gathered.

Once clean, the *limu* is drained and then chopped (i.e. *limu manauea* - *Gracilaria coronopifolia* J. Agardh, *limu huluhuluwaena* - same as *limu pakeleawa`a*), pounded (i.e. *limu wāwae`iole* - *Codium* spp., *limu lipoa* - *Dictyopteris*

²⁰ It has been my experience that the character of many older Hawaiians is one that supports meticulous actions. *Hana kāpulu* (messy, careless work) is especially looked down upon. To do things right the first time so that you won't have to do it again is the norm. Therefore, I don't find it surprising to see this attitude extending to this practice.

spp.), or soaked overnight (i.e. *limu kohu*, *limu `ele`ele* - *Enteromorpha* spp.) depending on the type of *limu* (Abbott 1996). In addition to breaking the *limu* into smaller, easily eaten bits, chopping and pounding helps to "release the `a`ala (fragrance)" (Abbott 1992). Reed (1907) reports that the *limu* is treated in some combination of breaking, pounding, and chopping.

Light salting is the next step for *limu* that will be consumed in the short term (~1 teaspoon salt/1 cup *limu*) (Abbott 1992). For certain *limu* that is stored for long periods of time, like *lipoa* and *limu kohu*, heavier salting is applied (~1/2 cup salt/1 cup *limu*) (Abbott 1992). As seasonally available species, *lipoa* and *limu kohu* are preserved in this manner for periods of shortage (even 6 months) (Abbott 1992)²¹. In an interview by Larry Kimura of Elizabeth Ewaliko (1974) from Wai`alae, O`ahu, Mrs. Ewaliko

²¹ "Salting" includes "*lomi*" or rubbing in the salt (Abbott - personal communication)

emphasizes salting as an extremely important step ("*kōpī ā miko!*").²²

Like other foods, different types of *limu* are prepared and eaten in many different ways by different peoples. Reed (1907) and Abbott (1996) provide many ways of preparing *limu*, and so I will not delve too deeply into the subject.

Limu fits into the main triad of the Hawaiian diet along with fish and *poi*, and so it is not surprising that the most popular Hawaiian way of eating *limu* is raw, with fish and *poi* (Abbott 1996). While modern preparations include cooking and boiling with other ingredients, only one clearly traditional cooking method was recorded: *limu`aki`aki* [*Ahnfeltiopsis concinna* (J. Agardh) Silva et DeCew] was cooked in the *imu*, or underground oven (Abbott 1992). Reed (1907) reports the use of *limu* in *laulau* which is cooked in an *imu*. In this case, the *limu* substitutes for the *kalo* leaves (*Colocasia esculenta* (L.) Schott) which surrounds a few pieces of meat and the whole bundle is

²² When talking about *limu wāwae`iole*, she talks of preserving it in ocean water or water with salt added. Using fresh water would result in its turning soft and undesirable.

wrapped in *ti* leaves (*Cordyline fruticosa* (L.) Goeppert).

It is unclear if this practice is of pre-contact origin (traditional), though it is certainly possible.²³

Certain combinations of *limu* (*limu wāwae`iole* and *limu lipe`epe`e* [*Laurencia* spp.], *limu manauea* and *limu mane`one`o* [*Laurencia nidifica* J. Agardh]) are preferred by some people, while others (*limu kohu*, *limu `ele`ele*) are generally not "tainted" by mixing with others (Abbott 1996).

Cultivating *limu*

Some information about the traditional cultivation of *limu* is available. *Loko i`a*, or fish ponds, were built in various designs with varying amounts of fresh water intrusion to provide a range of habitats for both fish and *limu*. *Limu `ele`ele*, *limu manauea*, and *limu huluhuluwaena* are examples of *limu* that can still be found growing in various *loko i`a* around the islands (Abbott 1992).

²³ Dr. Abbott comments, and I would agree, that if cooked *laulau* style and steamed for several hours the *limu* would completely disappear or gelatinize (Abbott – personal communication).

Limu was transplanted from one location to another, as is documented in the famous example of *limu huluhuluwaena* which was brought to Waikikī for Queen Lili`uokalani from either Honokōwai, Maui or Moloka`i (Abbott 1996). Living *limu* was brought on rocks, and according to a Pukui interview (1960), little stones with the *limu* covering it were ideal for transplanting purposes. Reed (1907) reports the transplanting of this same *limu* from Hawai`i to a *loko i`a* on Moloka`i by an old chief, and from Hawai`i to Kāne`ohe Bay by yet another chief. She speculates that this may have been a common practice of the chiefs of old when they moved from one island to the next, much like their "best taro and yam plants" that often made the trip.

Yet another example of cultivation comes from the island of Kaua`i in a bay called Moloa`a, where *limu* gatherers actively weed out undesirable *limu* so that the *limu kohu* can proliferate (Reed 1907). This could be a pre-contact "farming" practice that ensured the abundance of *limu kohu* for all living in that *ahupua`a*. Alternatively, this practice could be of recent origin, which would help

bolster yield to meet the large demand for *limu kohu* at the O`ahu markets.

Other small scale cultivation practices also exist. There is a group of people at `Ewa, O`ahu, led by Mr. Walter Kamanā, who are "re-seeding" the once luxuriant beds at One`ula Beach Park with different edible *limu* collected from Maui. The method I observed them using was to *haku*, or braid, *limu* with raffia into a circular lei approximately 18 cm (9 inches) in diameter. Regrettably, I was not able to witness the method of "planting" these lei or the success of establishment.

CHAPTER 3: METHODS

While searching for documented ethnobotanical methods to emulate in my research, it soon became clear that certain methods were uncomfortable for me or did not apply to the type of research that I was interested in. A few of these include the use of field forms with standard questionnaires (Given and Harris 1994), structured interviews (Alexiades 1996), and all types of quantitative methods. Finding the appropriate methods to suit my style became a melding of methods from different sources. Given and Harris (1994) put it best by explaining that "although there are some general basic principles (in ethnobotany), its detailed methodology must reflect the kind of flora of a region, and level and type of culture of the people living in that region."

Database Compilation

The database compilation was the first goal of this research project. In order to fulfill this goal a literature search was conducted at the Hamilton Library at

the University of Hawai`i at Mānoa and at the Bernice Pauahi Bishop Museum Library. In addition to the literature search, I listened to audio recordings of interviews with *mānaleo* (native speakers of Hawaiian).²⁴ Some of these interviews were conducted by Larry Kimura on a radio show that aired in the 1970s called Ka Leo Hawai`i. These recordings are housed at the Moore audio lab at U.H. Mānoa. The other interviews were conducted by Mary Kawena Pukui between the 1950s and 1970s. These recordings are housed at the Bernice Pauahi Bishop Museum Library. Both sources interviewed *mānaleo* to cover a range of topics including personal histories, experiences, information relevant to Hawaiian culture, opinions, etc.

Information gleaned from these sources was then organized into an alphabetically arranged relational database using Microsoft Excel®. Information was organized under the following headings: *Limu* name (Hawaiian), Source,

²⁴ I was not able to listen to all of the audio recordings that referenced *limu* due to time and policy restrictions of both institutions. Appendix E gives reference information for all audio recordings (from Ka Leo Hawai`i and Mary Kawena Pukui interviews) that include a reference to *limu*.

Page Number, Information, Synonyms, See Also, Shared Names, and Latin Names. In addition to the literary and audio sources, new information obtained through my own interviews was also included in the database.

Interviews

Conducting interviews with *limu*-knowledgeable people was the second goal of my research. The methods used for finding sources, discussing *limu*, and recording information were rather basic. The keys to being successful in meeting people and encouraging their participation in my study were honesty, familiarity with cultural norms, and respect.²⁵ Being part of the culture and having a genuine interest and desire to learn from my own culture was my biggest asset.

Finding people who have knowledge of *limu* started with talking to family and friends. I compiled a list of possible *limu*-knowledgeable people and, depending on how

²⁵ I was forewarned by `Anakala Eddie Kaanana, a *kupuna* (elder) that I love dearly and respect immensely, that it is very important to carry yourself properly and to approach and treat *kupuna* the right way. He said the wrong etiquette will lead to them "giving you the run around, that's for sure!" I can attest to this because I have heard numerous stories of this happening and have seen it happen to people, too.

familiar I was with each person, I either contacted the person myself by phone or had the linking person contact him/her for me first. If needed, I would introduce myself, and then explain my interest in *limu*, the purpose of my research, and the culminating product of the research being a Master's thesis paper. If the person was comfortable in teaching me what he/she knew about *limu* I would set up a meeting.

In explaining my research, I discussed the gap between the abundance of *limu* names on record, and the dearth of identifications. I shared my desire to learn the names of the different kinds of *limu* and how to use them.

Upon meeting an informant, I would bring some kind of token of my appreciation.²⁶ Sometimes this was a little food (i.e. poke, poi, jam, or bread, something small), or a book (*Limu* by Dr. Abbott), or the list of Hawaiian *limu* names that I was compiling (Appendix B), or some combination of the above items. I again explained my purposes for studying

²⁶ A *`ōlelo no`eau*, or Hawaiian proverb, explains this custom (Pukui 1983). "*I hele i kauhale, pa`a pū`olo i ka lima*. In going to the house of others, carry a package in the hand. Take a gift."

limu and emphasized that before finalizing my report I would let each informant review their own contributed information to make sure that the information was accurate. Final consent from each informant was requested after all editing revisions and/or omissions were made.

The interview process varied from one informant to the next. If possible, meetings were arranged to be at the site(s) where the informant regularly goes to pick *limu*. As a participating observer (Alexiades 1996), I would simply follow the lead of the informant as they would show me where the different *limu* grew, the names of the *limu*, how to pick the *limu*, etc. If I found other interesting *limu* I would inquire about these *limu* for names and uses. After picking *limu*, we would go to a spot where we could clean the *limu* and I would test my memory by reciting the names and uses for each. This was good practice for me and it verified the information and sometimes sparked additional information from my informant. I then explained the method of preparing herbarium vouchers for the purpose of attaching information to an actual *limu* specimen. Once I

felt that I had taken up enough of the informants' time, I made sure that I had all the information needed to fill out the Personal Information Sheet (Appendix C) for that informant.²⁷ The information sheet provided me with some background information for each informant and the source(s) of their information.

If picking *limu* couldn't be arranged, I would set up a meeting to "talk story", or to conduct an unstructured interview (Alexiades 1996) where the conversation is casual and unstructured, but purposeful. If I felt comfortable asking, I requested to record the conversation for accuracy.²⁸ Usually after explaining my interest and purposes for studying *limu*, the informant would naturally discuss the different types of *limu* that he/she is accustomed to using. I occasionally asked questions about the appearance of certain *limu* or where it can be found

²⁷ Personal information usually surfaced naturally when "talking story."

²⁸ Through the course of my research, I found that asking to record the interviews was more of a personal obstacle than something that my informants felt uncomfortable with. It made me feel like my work was suspicious and not genuine. However, Dr. Abbott informs me that the older people that she and Mrs. Williamson interviewed in the 1970s were distracted by a recording machine, so they gave it up (Abbott - personal communication)

growing if this information wasn't covered. If the opportunity arose, I arranged an additional meeting so that I could bring some *limu* that I was curious about (including *limu* that I thought he/she discussed) in order to make identifications and herbarium vouchers ("Plant Interview" - Alexiades 1996).

Herbarium Voucher Construction

Herbarium vouchers were prepared by allowing the *limu* to dry on standard 11.5" x 17" herbarium paper using a method taught to me by Dr. Celia Smith of the University of Hawai'i Botany Department. In order to press and dry the *limu* specimens, "voucher sandwiches" were made with these items arranged in the following order: corrugated cardboard (12" x 18"), newspaper (4 -8 ply), herbarium paper, *limu*, wax paper, newspaper (4 - 8 ply), cardboard, (repeat sandwich). Heavy weights were placed on top and the whole press was allowed to dry for a week to two weeks. The press was checked daily to replace wet newspaper and to remove herbarium vouchers which were already dry. If the *limu* did

not stick naturally to the paper, glue was used. Herbarium voucher labels were prepared and attached to the voucher with the following information provided: Hawaiian *limu* name with source and likely place of name origin (depending on where the informant learned of the *limu* name), Latin name with authority, site (description, habitat, substrate, location), collector(s), date, determiner (of Latin name), and collection number. A list of the herbarium vouchers is included under Appendix D. The herbarium vouchers were submitted to the National Tropical Botanical Garden herbarium for preservation.

Equipment

Equipment used during research included a Sony digital recorder (IC Recorder ICD-MS1), Sony digital camera (CyberShot DSC-P1) with underwater housing, and 35 mm film camera (Canon Rebel 2000).

Limu List Construction

A "List of *Limu* Names" (Appendix B) was constructed in order to have a list of Hawaiian names that could be given to informants. This list was extracted from the database. New names were added to the list as they were encountered in interviews. Many of these entries are duplicated names with slight variations in spelling or entirely different regional names applied to the same *limu*. Because some sources used the Hawaiian `okina (glottal stop) and kahakō (macron) and others didn't, both were left out. The total amount of names included in this list should not be mistaken for the total amount of *limu* named by Hawaiians.

CHAPTER 4: RESULTS

Informants

Informants interviewed are given below together with background information, and lists of *limu* discussed for each informant interviewed.

Sam Ah Quin lives in Lā`ie, O`ahu. He learned most of his *limu* information from the late Helen Hoopii Kenolio from Kihei, Maui. The Hawaiian *limu* names that he discussed were *huluhuluwaena*, *manauea*, *wāwae`iole*, *līpe`epe`e*, *`ele`ele*, *kohu*, *līpoa*, *māne`one`o*, *owakawaka*, *kala*, and *`opihi*.

Carol Anamizu lives in Kahuku, O`ahu but she was born and raised on Moloka`i. She learned most of her *limu* information from Moloka`i. Mrs. Anamizu, Joy Anamizu (daughter), and I picked *limu manauea* together at Kahuku Point.

Ulu Garmon lives in Keaukaha, Hawai`i. She was also born and raised there. She is one of the daughters of the

late Edith Kanaka`ole.²⁹ The Hawaiian *limu* names that she discussed were `aki`aki, *alani*, *huna*, `ele`ele, *huluhuluwaena*, *hulu`ilio*, *limu kala*, *pūhā*, *pahe`e*, *kāhili*, *pālahalaha*, *manauea*, *wāwae`iole*, and *līpoa*.

Jeanette Kaualani Akiu Howard lives in Punalu`u, Hawai`i. She was born right at Punalu`u beach and still lives a block away from where she was born (1923). She also runs a lei and memorabilia stand at the beach. She learned about *limu* from her grandmother. She and I picked and discussed *limu huluhuluwaena*, *kō`ele`ele*, *limu `ele`ele*, *līpe`epe`e*, `aki`aki, *limu kohu*, *limu kala* and *pālahalaha*.

Joseph "Blondie" Kaina lives in Hāna, Maui. Born (1943) and raised there, Uncle Blondie is one of the town's most renowned fishermen. He is part of the "*akule hui*", a group of fishermen that surround *akule* (big-eyed scad fish) and divide it out to any persons who come to help open fish out of the nets. We met and discussed *limu* in the *hale*

²⁹ Aunty Edith is one of the most highly revered expert/practitioner/educator of Hawaiian culture. She was a master chanter, *kumu hula* (*hula* instructor), and *haku mele* (song composer). Perhaps her most famous composition, "*Ka Uluwehi o ke Kai*", talks about the delicious *limu* of the ocean – *līpoa*, *limu kohu*, *pahe`e*, *līpalu*.

kilo, a thatched house, that was built on Ka`uiki Hill overlooking Hāna Bay. The "*akule hui*" built this hale at this lookout spot, where they go daily to observe the *akule* schools. Meetings with Uncle Blondie often turned into discussions between many different fishermen including Wilfred Kala, John Kiambao, Masu Hashimoto, Milton Diego, and others. The *limu* names discussed at the *akule hui* were *nei*, *pe`epe`e*, *limu pehu*, *nānui*, *limu make*, *limu kala*, *līpoa*, *limu kohu*, *wāwae`iole*, *huluhuluwaena*, *limu `ele`ele*, *limu lauoho*, *iliau*, *enenue limu*, and *turtle limu*.

Kawika Kapahulehua lives on O`ahu, but was born in Hilo and raised on Ni`ihau. His mother was the source of his *limu* information. `Anakala Kawika is a native speaker of Hawaiian language and he is part of the University of Hawai`i at Mānoa's Mānaleo program. This program brings in Hawaiian language native speakers to help students learning Hawaiian language. Anyone can visit and talk story with these native speakers to improve their Hawaiian. He discussed two types of *limu*, *limu `ula* and *limu kanaloa*.

John Lind is the son of Daisy Lind, a well known kupuna in Hāna, both of whom live in Kipahulu. Uncle John told me about how he replants *limu kohu* "roots" that he accidentally brings home when he picks *limu*. His method is to stuff the holdfasts into small holes in the reef.

Ipo Wong is from Ni`ihau and is also a native speaker of Hawaiian involved with the Mānaleo program at U.H. at Mānoa. She discussed *limu kohu* and *līpoa* on Ni`ihau.

Data

Data collected from the literature, audio records, video records, and interviews are organized in the *Limu* Database (Appendix A). The information gleaned from audio and video records as well as interviews has been extracted from the Limu Database and is presented in the same table format within this results section (Table 1).

Table 1
Audio/Video/Interview Data

LIMU NAME	SOURCE	TYPE	INFORMATION	SYNONYMS	VOUCHER # & LATIN NAME
'a'ala'ula	Kauahipaula	Video: 'AM	Pālahalaha. Nui ka ulu 'ana, koku 'ūpī.		
'aki'aki	Haanio	Audio	Ka 'ai kela a ka honu. 'A'ole 'ai 'ia ma mua. Lohe 'o ia 'ai ka Pilipino. Kupa a mo'a a palupalu. 'A'ole kēlā he 'ai na ka Hawai'i.		
'aki'aki	Howard	Interview	She doesn't eat this limu but it grows all over the rocks in Puna.		KA067LIMU <i>Ahnfeltiopsis concinna</i> (J. Agardh) Silva et DeCew
'aki'aki, limu	Garmon	Interview	Used in cursing.		
alani, limu	Garmon	Interview	One type is edible and the other is poisonous (and used for stunning fish). Both resemble lipoa but are softer.		
'ele'ele	Ah Quin	Interview	Mullet eat the young 'ele'ele. Awa kalamoho eat the long limu. Laniakea's kau is July - August.		
'ele'ele, limu	Kaina	Interview	Also limu lauoho.	limu lauoho	
'ele'ele, limu	Kaalakea	Audio	If there is fresh water, get. If there is no fresh water, no limu 'ele'ele.		

Table 1
Audio/Video/Interview Data

LIMU NAME	SOURCE	TYPE	INFORMATION	SYNONYMS	VOUCHER # & LATIN NAME
'ele'ele, limu	Ewaliko	Audio	<p>\$4/quart, limu 'ele'ele, ho'okomo i loko o ka stew meat. Nā kau o ka limu, 'elua manawa o ka makahiki, puka mai kēia limu. When ua, wash all the dirt, pau ka lepo, a laila ulu mai ka limu, ma'ma'e. Huki me ka lima a ho'oma'ema'e.</p> <p>Luhi ka hana 'ana. Aia a miko, 'ono. 'A'ole 'ala ka limu i kēia mau lā, nui nā mea o ke kahawai e holo nei. I pule ka waiho 'ana i loko o ka 'ōmole ma ka pahu hau. Have to freeze it after. Uliuli, 'o ia ka pololei. Pala mai ma hope (hākeakea mai).</p> <p>'Oi aku ka uliuli ma mua o ka pala. 'O ka mea hou ka mea pokopoko. Ma Kahala Hilton.</p>		
'ele'ele, limu	Kauahipaula	Video: 'AM	Ke kau ka limu 'ele'ele, loloa.		
'ele'ele, limu	Garmon	Interview	This limu likes to grow where there is some flow in the water (fresh). You collect it by pinching a little at a time so it doesn't get sandy.		
'ele'ele, limu	Aiona	Interview	My dad told me about his mother picking 'ele'ele and that when they went to pick it, they needed to do it VERY carefully so no sand would be mixed in with it. She would give them lickings if it were sandy.		
'ele'ele, limu	Howard	Interview	She picks up this limu at Punalu'u Beach, growing on the rocks and in the sand at the intertidal area (where the freshwater springs are).		KA062LIMU <i>Enteromorpha prolifera</i> (Muller) J. Agardh
enenu limu	Diego	Interview	Red with leaves, skinny on bottom and branching on top, smooth. Also called turtle limu		
General Limu	Haanio	Audio	'A'ole nui loa i kēia manawa. Kāpulu kahakai, lepo. Ma mua, kapu kahakai, 'a'ole kāpulu 'ia. Ma mua he wahi no ka 'au'au, 'a'ole 'au'au ma nā 'ano wahi like 'ole.		

Table 1
Audio/Video/Interview Data

LIMU NAME	SOURCE	TYPE	INFORMATION	SYNONYMS	VOUCHER # & LATIN NAME
General Limu	Ellis	Video: 'AM	Remembers eating 'ele'ele, lipoa, lip'e'epe'e, limu wawae'iole.		
General Limu		Video: 'AM	A list is prepared of limu: limu kohu, limu lipoa, limu 'ele'ele, limu manaua, limu kala, limu lip'e'epe'e, limu wawae'iole, limu huluhuluwaena, limu 'opihi.		
General Limu	Kaanana	Video: 'AM	'Ako i ka limu.		
General Limu	Serrano	Video: 'AM	Remembers eating kohu, 'ele'ele, manaua, lipoa, lip'e'epe'e. If you huki the limu it will be gone, 'ohi limu is the correct way. Lipoa is eaten with fish, lip'e'epe'e is salted and eaten with poi or 'opelu. These days there isn't limu like before.		
General Limu	Kaina	Interview	Maka'alae is the main spot for limu in Hāna. Hāna does not have certain limu like Lahaina side like huluhuluwaena, ogo, etc. Those types of limu like dirty water, where Hāna has clean water. Lots of rain makes the limu grow long. The 'ōpū of the enenue has limu that you can rinse and eat with poke.		
General Limu	Keohokalole	Video: 'AM	'Ohi limu ke ma'ema'e ke kai. Kai nui, nui ka lepo. Nui ka limu ma Kāne'ohe. Remembers 'ele'ele and huluhuluwaena.		
General limu	Ah Quin	Interview	Manawea, waiwai'eole, li peepee, kohu, lipoa, hulu hulu waina, maneo neo, owaka waka, kala, opihi (2 types), node, ribbon. Kau - season thereof. Kihei - Garden of Eden. Turtle feed from July to September at Kawailoa, O'ahu. Pollution and overharvesting changed the limu. His kumu was mostly Helen Ho'opi'i Kenolio - "Limu Lady of Maui" - Kihei. Foreign limu is taking over the reefs. When gutting fish, you can observe the types of limu that fish eat.		
General limu	Kaalakea	Audio	Kopekope i ka limu a hana po'opo'o. 'Oko'a ka limu i kēia manawa.		

Table 1
Audio/Video/Interview Data

LIMU NAME	SOURCE	TYPE	INFORMATION	SYNONYMS	VOUCHER # & LATIN NAME
hinakea	Haanio	Audio	Limu kama'āina o Kona. Ulu palaha ma ka pōhaku pāhoehoe. Kopekope me ka pahi, ku'i i ka hale. Limu kai kēlā, 'a'ole 'ai pa'a like me ka līpe'epe'e..." 'A'ala, 'ono.		
hinaula	Haanio	Audio	Limu kama'āina o Kona. Ulu palaha ma ka pōhaku pāhoehoe. Kopekope me ka pahi, ku'i i ka hale. Limu kai kēlā, 'a'ole 'ai pa'a like me ka līpe'epe'e..." 'A'ala, 'ono.		
huluhuluwaena	Ah Quin	Interview	With ake. With squid.		
huluhuluwaena	Kaalakea	Audio	Mixed with ake.		
huluhuluwaena	Ewaliko	Audio	Ma Kahala Hilton. Ulu pū me ka limu uliuli. Ho'ohui 'ia me ke ake. 1 kālani huhuluwaena, 5 kālani ake. 'Ula'ula kēia limu.		
huluhuluwaena	Kaina	Interview	Mixed with ake.		
huluhuluwaena	Garmon	Interview	Grows on coral. Her grandmother was the "ake person" of her time - she was famous for making the huhuluwaena with ake (raw beef liver) for everyone. Then her mother (Aunt Edith) became the "ake person".		
huluhuluwaena, limu	Howard	Interview	Picks up this limu at Punalu'u Beach (Hawai'i) growing in the shallow area in the sand (where there is fresh water springs under ground).		KA065LIMU <i>Grateloupia filicina</i> (Lamorous) C. Agardh
hulu'ilio	Garmon	Interview	This limu is soft like wool (recognized from picture in Magruder book).		

Table 1
Audio/Video/Interview Data

LIMU NAME	SOURCE	TYPE	INFORMATION	SYNONYMS	VOUCHER # & LATIN NAME
huna	Garmon	Interview	Doesn't eat this type of limu (recognized from picture in Magruder book).		
iliau	Kaina	Interview	Lawalu or boiled and then fed to the enenue. It gives them diarrhea. Come back 1-2 days later and hook them with the same limu tied to the hook. Also gives pig diarrhea. If in the sun, turns yellow.		KA034LIMU <i>Ahnfeltiopsis concinna</i> (J. Agardh) Silva et DeCew
kāhili	Garmon	Interview	This is the really tough limu that looks like a kāhili (<i>Turbinaria ornata</i>).		<i>Turbinaria ornata</i> (Turner) J. Agardh
kala	Ah Quin	Interview	Enenue feed on kala, ribbon, etc.		
kala, limu	Kaina	Interview	Certain type is eaten. Some people cook it to soften it.		
kala, limu	Ewaliko	Audio	'A'ole 'ai 'ia, he maunu a he lā'au. Kekahi po'e 'oki'oki a 'ai.		
kala, limu	Garmon	Interview	Never ate limu kala, it was used ceremonially.		
kala, limu	Kaanana	Interview	According to the old stories, the kūkini (the chief's fastest runners) would use limu kala to wrap living fish that the chief desired and bring them long distances to the chief (and it would still be living).		
kala, limu	Howard	Interview	She doesn't eat this one.		KA066LIMU <i>Sargassum echinocarpum</i> J. Agardh

Table 1
Audio/Video/Interview Data

LIMU NAME	SOURCE	TYPE	INFORMATION	SYNONYMS	VOUCHER # & LATIN NAME
kanaloa, limu	Kapahulehua	Interview	A type of edible limu.		
kihe	Haanio	Audio	'Ai me ka 'opihi, i'a maka. Limu kama'āina o Kona. Limu kai kēlā, 'a'ole 'ai pa'a like me ka līpe'epe'e..." 'A'ala, 'ono.		
kohu	Ah Quin	Interview	Color and iodine depends on area gathered. November , April is kau. Red one has low iodine.		
kohu, limu	Kaina	Interview	The best. Crisp, strong smell. Lots of rain makes limu grow , the kohu can get really long.		KA002LIMU <i>Asparagopsis taxiformis</i> (Delile) Trevisan
kohu, limu	Poepoe	Video: TME	Mo'omomi has the best limu kohu. There are two ways to pick limu: cutting, pulling but leaving the roots behind.		
kohu, limu	Ewaliko	Audio	\$20/ōmole (quart), limu kohu. Aia i waho loa kēia limu, 'ula'ula. Wae 'ia ka mea a pau a ho'okū i loko o ka wai pa'akai. I kekahi lā, helele'i mai ka lepo a pau loa. A ma'ema'e, 'oki'oki a kōpī hou. Ke huki mai 'oe, hemo pū mai nō me ke one, a lawe 'oe i ka mea o lalo aia ka limu i luna. 'O lalo, aia i laila ke kumu.		
kohu, limu	Wong	Interview	About four days after it rains, you can go get the limu kohu. This is the main limu eaten on Ni'ihau.		
kohu, limu	Kauahipaula	Video: 'AM	Huki i ka limu kohu.		

Table 1
Audio/Video/Interview Data

LIMU NAME	SOURCE	TYPE	INFORMATION	SYNONYMS	VOUCHER # & LATIN NAME
kohu, limu		Video: 'AM	Ki'i 'ia i ka manawa kai malo'o ma hope o ka ua nui. Ho'okū i loko o ka wai a ao ka pō, a laila e ho'oma'ema'e a kōpī i ka pa'akai.		
kohu, limu	Ellis	Video: 'AM	Kaua'i's kohu is loloa (long) where it is 'oki 'ia. O'ahu's kohu is pokopoko (short).		
kohu, limu	Lind	Interview	Method for planting limu kohu. Take back the roots (holdfasts) that sometimes come out when picking this limu, and stuff them into little holes in the reef where limu kohu normally grows.		
kohu, limu	Howard	Interview	She picks up this limu at a place called laupapa 'ōhua (reef with manini fish babies).		KA061LIMU <i>Asparagopsis taxiformis</i> (Delile) Trevisan
kō'ele	Howard	Interview	She picks up this limu at a place called laupapa 'ōhua (reef with manini fish babies). This limu is eaten with 'opihi.	kō'ele'ele (also nei)	KA064LIMU <i>Ahnfeltiopsis flabelliformis</i> (Havey) Masuda
kō'ele, limu	Ellis	Video: 'AM	Uaua. Ulu me ka hā'uke'uke.		
kō'ele'ele	Howard	Interview	She picks up this limu at a place called laupapa 'ōhua (reef with manini fish babies). This limu is eaten with 'opihi.	kō'ele (also nei)	KA064LIMU <i>Ahnfeltiopsis flabelliformis</i> (Havey) Masuda
lepe-a-Hina, limu-a-Hina	Ah Quin	Interview	Red and slimy. Eaten with lemon and soiū.		
līpe'epe'e	Ewaliko	Audio	'Āina Haina. Crunchy. 'Oi aku ka 'ono o ka līpe'epe'e ma mua o ka manauea.		

Table 1
Audio/Video/Interview Data

LIMU NAME	SOURCE	TYPE	INFORMATION	SYNONYMS	VOUCHER # & LATIN NAME
līpe'epe'e	Keohokalole	Video: 'AM	Season is Kekemapa, New Year. Kualoa has that kind of good limu.		
līpe'epe'e	Kauahipaula	Video: 'AM	Ma Nānākuli. Aia i lalo o ka 'aki'aki		
līpe'e'pe'e	Haanio	Audio	Loa'a ma Kona, 'a'ole nui.		
līpe'e'pe'e	Howard	Interview	She picks up this limu at a place called laupapa 'ōhua (reef with manini fish babies).		KA068LIMU <i>Laurencia</i> sp.
līpoa	Kaina	Interview	There are different kinds of līpoa.		
līpoa	Wong	Interview	The kala and nenua eat the līpoa. On Ni'ihau, there is a lot of līpoa, but the Ni'ihau people consider it 'ōpala (rubbish). When it is the right season, the ocean is thick with līpoa and it washes up on the sand making a very strong smell.		
līpoa	Haanio	Audio	Loa'a ma Kona, 'a'ole nui.		
līpoa	Ewaliko	Audio	Holoī nō 'oe, kaka 'oe a 'oki'oki. Ho'okomo i loko o ka 'ōmole. Maunalua used to be (Hawai'i Kai now). He manawa nō e pae mai. 'A'ole hana lei 'ia, he mea'ai wale nō.		
līpoa	Ellis	Video: 'AM	Waikiki is onaona i ka līpoa.		
līpoa	Ah Quin	Interview	Kau is February on Maui.		

Table 1
Audio/Video/Interview Data

LIMU NAME	SOURCE	TYPE	INFORMATION	SYNONYMS	VOUCHER # & LATIN NAME
lipoa	Garmon	Interview	Her all time favorite limu is lipoa.		
lipu'upu'u	Keohokalole	Video: 'AM	Eaten with salt salmon.		
make, limu	Kaina	Interview	Out Muolea side.		
manauea	Ewaliko	Audio	Palupalu mai ko kākou manauea ma mua o ka ogo. 'Okī'oki e like me ka limu kohu. 'A'ohe maika'i ka mea pu'upu'u. Nānā 'oe i ka mea 'akahi nō a puau (?) mai i nuna. Ki'i i ka mea hā'ula, maika'i. 'Āina Haina.		
manauea	Kaalakea	Audio	Pakēpakē ke hou. Palahē mai i ka wai wela.		
manauea	Haanio	Audio	'Ai 'ia, he mea ho'ohuihui.		
manauea	Garmon	Interview	Recognized from picture in Magruder book.		
manauea	Anamizu	Interview	Kahuku Point still has a lot of manauea growing in the limestone depressions. If you're not going to eat it all, it can be preserved with some salt in a jar and refrigerated.		KA059LIMU <i>Gracilaria coronopifolia</i> J. Agardh

Table 1
Audio/Video/Interview Data

LIMU NAME	SOURCE	TYPE	INFORMATION	SYNONYMS	VOUCHER # & LATIN NAME
nanui	Kaina	Interview	Looks like lipoa. It is also eaten. It has a stronger smell than lipoa and you can smell it when driving on Hāmōa Road sometimes. It has seasons when it floats in and is eaten by the enenue. When you cut the `ōpū of the enenue, you can rinse the insides and mix that limu (which is already chopped up for you) with the poke.		
nei	Kaina	Interview	`Opihi limu, oldtimers eat with `opihi (picked when dark). Smooth and crunchy.	(also kō`ele, kō`ele`ele)	KA028LIMU <i>Ahmfeltiopsis flabelliformis</i> (Havey) Masuda
ogo, limu	Ili	Video: `AM	`Ohi i ka limu. Before, limu ogo was rubbish.		
ogo, limu	Keohokalole	Video: `AM	Nui ma Kualoa.		
opihi limu	Ah Quin	Interview	1) Green with clusters. 2) Long red.		
`opihi limu	Ewaliko	Audio	Hīki nō ke `ai.		
`opihi, limu	Kaalakea	Audio	Pupupu kona `ano. Kukū `o lalo.		
`opihi, limu	Ellis	Video: `AM	`A`ole maopopo ka inoa maoli.		

Table 1
Audio/Video/Interview Data

LIMU NAME	SOURCE	TYPE	INFORMATION	SYNONYMS	VOUCHER # & LATIN NAME
owakawaka	Ah Quin	Interview	Dark brown, lettuce like, brittle.		
'owakawaka	Keohokalole	Video: 'AM	Type of limu.		
pahapaha	Ewaliko	Audio	Pae mai nō 'o ia, uliuli. 'Ai ka po'e kepanī, 'oki'oki me ka soiū a he aha lā.		
pahe'e	Haanio	Audio	Ulu ma ka lae o Pāhe'ehe'e ka inoa. Ho'okahi ulu 'ana o ka makahiki.		
pahe'e	Garmon	Interview	Recognized from picture in Magruder book.		
pakeleawa'a	Sanborn	Audio	Limu planting. They did it. "Chop-chop" is taken on small stones. Don't uproot. Doesn't grow in rough water, likes sand. Grows at low tide, long. More 'ono at some places because of the spring water. If a woman is pe'a, 'a'ole hele i ka hana, haumia. 'A'ole komo i ke kai.		
pākoa	Ewaliko	Audio	Pahe'e loa. Ulu i luna o ka pōhaku a me ke one. Palupalu, kohu kilika.		
pālahalaha	Garmon	Interview	Put into soup after you turn the fire off (recognized from picture in Magruder book).		
pālahalaha	Howard	Interview	She doesn't eat this limu but she knows some people eat it with shoyu (Japanese style).		KA063LIMU <i>Ulva fasciata</i> Delile

Table 1
Audio/Video/Interview Data

LIMU NAME	SOURCE	TYPE	INFORMATION	SYNONYMS	VOUCHER # & LATIN NAME
pe'epe'e, limu	Kaina	Interview	Grows in cracks, plenty down Maka'ala. Old kind has coral sometimes, so you shouldn't pick that one.		
pehu, limu	Kaina	Interview	Looks just like kohu, except it flattens when taken out of the water. Doesn't have a strong smell like kohu and it tastes hot. He knows of one guy that puts it in his stew to give it a hot flavor.		
puha	Garmon	Interview	Seasonal limu that likes water flow (recognized from picture in Magruder book).		
turtle limu	Kaina	Interview	Green limu that grows down Hāna Bay.		
turtle limu	Diego	Interview	Red with leaves, skinny on bottom and branching on top, smooth. Also called enenue limu		
'ula, limu	Kapahulehua	Interview	Red, looks like tipoa.		
wāwae'iole	Ewaliko	Audio	Aia nō i waho. 'A'ole makemake i ka mea pae mai. Kī i i ka mea, aia nō ma laila. 'A'ole maika'i ka mea nunui loa, ka mea makali'i mai nō. 'O ka mea makali'i mai ka mea helu 'ekahi. Pipili i ka 'ako'ako'a. "Hana 'oe me ka ma'ema'e, 'ai nō 'oe me ka ma'ema'e, 'a'ole kāpulu." Lawe i kālani kai a ho'okomo ka wāwae'iole, mau nō ke kō'i'i, 'a'ole palupalu. Palupalu i ka wai maoli. Inā 'a'ole kai, pa'akai, kōpī a miko.	'a'ala'ula	
wāwae'iole	Kaina	Interview	Hāna mostly has the kind that lies flat on the rocks, not the one that branches upright from the sand and sways.		KA060LIMU <i>Codium arabicum</i> Kützing
wāwae'iole	Garmon	Interview	Recognized from picture in Magruder book.		

Table 1
Audio/Video/Interview Data

LIMU NAME	SOURCE	TYPE	INFORMATION	SYNONYMS	VOUCHER # & LATIN NAME
wawae'iole, limu	Keohokalole	Video: 'AM	Has at Hau'ula.		

Discussion

Of the 229 distinct Hawaiian limu names compiled, 172 were unduplicated names (i.e. "pe`epe`e", "pe`epe`e, limu", "līpe`epe`e" are all considered duplicates).³⁰ The association of 36 names with actual *limu* has been documented through previous studies (of which I am confident because of confirmations through my studies), the association of 5 names with actual *limu* has been documented through this study, and 87 names have documented information about them but have not been associated with actual *limu*.³¹ This may be one of the largest lists of indigenous folk names for edible algae in the world. With half of these names unassociated with actual *limu*, there is a need to further this research and record these associations.

Through meeting people who use and have knowledge about *limu* I was able to learn a great deal. Therefore, I accept the first hypothesis, concluding that there are

³⁰ There are probably more duplicates in this list of 172 names but they haven't been identified yet.

³¹ See Appendix B for the breakdown of this data.

people remaining who can recognize and identify Hawaiian *limu*. Hearing Hawaiian names of *limu* that I had only previously read about made for exciting times. It's a very good feeling when you have found someone that knows other *limu* names that you have not heard of before. A diminishing breed, the *limu* gatherers are still around. I anticipate that the current trend of fewer people learning about the "less famous" *limu* will continue and efforts to record such information will become progressively more difficult.

There was a wide range of information gathered from various informants and from the literature search. Approximately 10% (103 out of 980) of the data entries in the *Limu* Database came from oral interviews that I conducted or were recorded by audio/video (Ka Leo Hawai'i, etc.). Though my main interest was in recording the Hawaiian names and uses along with collecting the samples, other types of information including distributions, seasonality of *limu* for different locations, and interesting anecdotes were also brought forth. For example, it is clear that there are certain types of *limu* that are

seasonal (i.e. *limu pahe`e*, *limu `ele`ele*, *lipoa*) while others can be found year around (i.e. *limu kohu*, *limu wāwae`iole*). And then there are certain times that are good for picking *limu* (i.e. during the quarter phases of the moon because of the mild tide fluctuations making it less likely that the *limu* will be "sunburnt", or a couple of days after heavy rains for *limu kohu* because the *limu* will be longer). While all informants knew intimately what kinds of *limu* were in their own "backyard", some were even aware of distributions of certain *limu* (especially the kinds not available at home) for other parts of the island. For example, Blondie Kaina told me that *limu huluhuluwaena*, *limu `ele`ele*, and *limu ogo* among others can't be found in abundance in Hāna or on the East side of Maui in general, but that these were *limu* that thrive in the waters of Kīhei, Lahaina, Kanahā, etc. probably because of the water conditions (nutrients, temperature, salinity, etc.). While information about distribution and seasonality of *limu* gained from this research was more anecdotal, future research focusing on these aspects for different types of

limu could be very useful and important for tracking the change of *limu* availability over time.

A common theme that I encountered was that the *limu* isn't like it used to be. Whether the taste is different or it isn't abundant like before, it seems that the *limu* is changing because of social and environmental changes. The reasons for this change, according to some of the informants (Elizabeth Ewaliko), are a combination of pollution of our waters and greediness of some people who take everything they can get. The trend seems to be the same for fish according to many casual conversations with old-timer fisherman who can reminisce about more abundant times.

The informants I spoke with agreed that picking *limu* should not be done by pulling and uprooting the *limu*, but by carefully plucking the *limu* to leave behind the holdfasts. By using this collection method, you would also be conserving the resource and assuring that there would be more upon your return. None of my informants were commercial fishermen and each was tied very closely to

their respective places where they "pick up" *limu* because of their long tradition of gathering at those places³² and because it was their home area, so this may have had a bearing on the methods that they used (sustainable harvest for the family versus harvest for economic gain).

As far as uses other than edible, only Aunty `Ulu Garmon mentioned ceremonial use (*limu kala*) and one used for cursing (*limu `aki`aki*). This may be because I did not ask specifically for these uses or because I spoke with people who primarily use *limu* for food and this was my obvious interest during interviews. Perhaps if I interviewed *kahuna* (*lā`au lapa`au*) I might have learned more about medicinal and ceremonial uses of *limu*.

Admittedly, my second hypothesis is a complex statement that is easily supported. Simply find a single informant that can tell you what, how, where and why they pick *limu* and it's just about covered. The real question is how much and what kind of traditional knowledge about *limu*

³² Place is an important component of Hawaiian culture because of the connection one has to the land, people, culture, and history of one's birthplace. If the connection is strong it will translate into pride and result in care of the place.

is still kept in the minds of modern practitioners as compared to earlier times and how much of the old knowledge is left. For the purpose of this report and based on what I did learn from my informants, I also accept the second hypothesis that there was a wide range of *limu* knowledge that different informants covered. The crucial question, however, still remains- how does the current collective pool of traditional *limu* knowledge compare with the same pool 100 years ago (or 200 years ago, or 100 years from now for that matter!)? Part of this question was answered in the reflections of a few informants reminiscing of the old folks that they remember and revered who used to know "all the *limu* and their uses".

This question about the direction that the information that we desperately try to record and conserve is going made me question how this body of information evolves. My initial belief was that the pool of traditional information can only get smaller because of the inability of a person to pass on absolutely all knowledge to another. This might be true, depending on the definition of "traditional." One

of the personal hurdles that this research project has allowed me to 1) identify, and 2) accept and overcome, is the ideal that young Hawaiians are often searching for in their quest to gain knowledge about our culture and history. This ideal is the search for information, whether it pertains to culture, history, botany, etc., that pre-dates contact with Captain Cook in 1778 because of its "true and untainted" nature, which makes it "traditional." My quest was the same, to be able to identify what information/practices was "truly Hawaiian", and what was developed/introduced/modified after contact. This ideal was becoming an obstacle for me because it was becoming the tool that I used to gauge all information. "Is this traditional or is this post-contact?" It was a problem because it devalued information that was gained through experience. It also dictates that things cannot be given Hawaiian names, or practices cannot be evolved without the stigma that they are "non-traditional." This is a problem for me because we are Hawaiian. No more and no less than the Hawaiians pre-Captain Cook. This research has taught me

to discard my ideals of traditional vs. non-traditional and accept that we are what we are by learning from our own experiences as well as from the past.

As expected, the informant's knowledge was directly related to the place that he/she learned about *limu*. While most informants were aware of different *limu* that grew outside of his/her harvesting areas, the majority of knowledge came from his/her harvesting grounds. Part of the reason why this is so is because the people I spoke with have a practical knowledge base. They know what they know by doing and most of them learned about *limu* from their elders when they were young. A trend that we may see grow as the world becomes a "smaller" place because of the media, higher education, and the world wide web, is that people's knowledge will become "homogenized." My knowledge about *limu* is the perfect example. I come out of this research knowing a heck of a lot about *limu* but it is from reading books, listening to tapes and videos, and interviewing people from many different places. I may know a lot, but my information is not distinctly tied to place

or practicality. This is not necessarily a bad thing but it is very acultural as Hawaiian culture goes because of the importance of tying things to place. Where the information comes from is just as important as the information itself.

There is a small industry developing in the way of *limu* cultivation. *Limu* farms in Kona and Moloka`i (Machado `ohana) are currently producing *limu* ogo for sale at markets on most, if not all, of the Hawaiian Islands. Additionally, the recent resurgence in fishpond restoration on the main islands (Hawai`i, Maui, Moloka`i, O`ahu, and Kaua`i) has sparked interest in the cultivation of *limu* within fishponds for food (both for fish and human consumption) and stabilization of the fishpond.

If the term cultivation is used loosely, it can also be applied to most *limu* gatherers who visit the same locations frequently to collect. These *limu* gatherers develop an intimate understanding of the locality, its conditions, and the particular *limu* that they collect. By harvesting properly (leaving the "roots" behind), occasionally weeding undesirable, encroaching *limu*, and in

one case, replanting roots in different locations (John Lind plants *limu kohu* roots that accidentally make it into his harvest), the practical *limu* harvester is, in fact, tending and cultivating his/her *limu*.

CHAPTER 5: CONCLUSION

Embarking on scientific research that aims to elucidate information from within my culture was very hard for me. There are still lingering feelings of resentment towards the whole process within myself. Before starting the research, I wrestled with the idea of intracultural research and, particularly, which methods would be acceptable to my culture. I wanted to learn about the names and uses of different *limu* in a casual, culturally appropriate setting so that I could perpetuate these traditions with my own family and to document this information for future generations. These goals did not always mesh nicely with some of my doubts and fears about the process.

There were a number of things about the scientific process that made this project uncomfortable. Informed consent, while extremely important and ethical, was very awkward for me personally, especially because I wanted to preserve an informal setting. Asking for verbal/written consent made me feel like there was something about this

experience to be suspicious of. I was also terrified of rejection. I think a person who is learning from a culture other than his/her own is better able to deal with rejection. I was afraid of being rejected by people within my own culture and any kind of lasting effects that it might have on the perception of me in the eyes of that informant, his/her family, and broader community. In a sense I did not want to be viewed primarily as a scientist trying to gather information rather than a Hawaiian wanting to learn about his own culture.

Something that bothered me that springs from my own personal culture, not necessarily Hawaiian or local culture is that I didn't want to be a burden to these people. While most of them seemed to enjoy sharing their *mana`o*, it nevertheless concerned me that I would be taking up too much of their time.

I also struggled with the idea of learning from multiple *kumu* or sources. Learning things like picking and eating *limu* were traditionally passed on in the natural process of young ones doing these things with their family.

Because I'm older and don't have family that can teach me about these things, and I wished to learn about *limu* names and uses from different areas, I had to sacrifice natural, cultural way of learning these things from relatively few, familial sources and learn from whoever was willing to share.

On top of all these other concerns, there was a pressure to collect enough data to fulfill the requirements of a Master's thesis within a certain time frame. Very few people really want to be a student forever but are proud of being life-long learners. This project is one for the life-long learner. While the information learned and presented thus far may fulfill the academic requirements, the work of learning, documenting, and perpetuating the use of *limu* throughout Hawai'i will never be complete.

I have learned a lot about myself through this research process. I think that people should be encouraged to learn and document information from our knowledgeable elders if it is something they are comfortable with. The wealth of information that slowly dies away as our *kupuna*

pass on, whether it be about *limu* or plants or place names or family *mo`olelo* should be recorded for the richness of our culture and to memorialize today, tomorrow's past.

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Appendix A: Limu Database
Full Reference Key

SOURCE	FULL REFERENCE
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Aiona	Aiona, William Thomas. Personal Interview. October 2001.
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**Appendix A: Limu Database
Full Reference Key**

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Poepoe	Mac Poepoe - The Molokai Experience. KHET-TV. 1996. Videotape 15591 (Sinclair AV Center).
Pukui	Pukui, Mary Kawena, and Samuel H. Elbert. 1986. Hawaiian Dictionary. Honolulu: University of Hawaii Press.
Reed	Reed, Minnie. 1907. The economic seaweeds of Hawaii and their food value. Ann. Report Hawaii Agricultural Experiment Station 1906: 61-88.

Appendix A: Limu Database
Full Reference Key

Sanborn	Winifred Kalei Saffery Sanborn - Pukui, Mary Kawena. 1960. Interview with Winifred Sanbor, Alice Aki, I. Ashdown. Bernice Pauahi Bishop Museum Audiotape Archives. A HAW 84.6.1.
Serrano	Hannah Serrano - `Aha Mānaleo (1998: Hawai'i). Limu Conference. Videotape 15429 (Sinclair AV Center).
Setchell	Setchell, William Albert. 1905. Limu. University of California Publications: Berkeley The University Press. 2 (3): 91-113.
Simpson	Simpson, Flora L. 1944. Memo to Seaweed Eaters. Paradise of the Pacific 56 (8): 5-6.
Tilden	Tilden, Joseph E. 1905. Algae collecting in the Hawaiian Islands. The Hawaiian Annual (1905)?: 131-145.
Wong	Wong, Ipo. Personal Interview. May 2001.

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
aaki	Henriques-Peabody	863					
aalaula	Setchell	96		pe'ape'e (Maui)			<i>Codium Muellieri</i> Kuetzing
aalaula	Tilden	133	Used, uncooked, as food.				<i>Codium adhaerens</i> (Cabr.) Ag. and <i>Codium tomentosum</i> (Huds.) Stackh.
a'ala'ula	Abbott 1996	19	Some people reserve this name for <i>Codium reediae</i> but most use names interchangeably.				<i>Codium reediae</i> Silva
'A'ALA-ULA	Doty	1	(Hawai'i)				<i>Codium Muellieri</i> Kuetzing; <i>C. tomentosum</i> (Huds.) Stackh.; <i>C. adhaerens</i> (Cabr.) Ag.
'a'ala'ula	Magruder	25					<i>Codium reediae</i> Silva
'a'ala'ula	Pukui	3	Velvety-green, succulent-appearing seaweeds, one of several species of <i>Codium</i> . Yields a red liquid when placed in a container overnight with brine, after chopping or pounding. Both the liquid and the seaweed are well liked, being eaten plain or with other food. (KL line 47.) 'A'ala'ula is the common name on Kaua'i and Maui, wāwae'iole elsewhere.	wāwae'iole			<i>Codium</i>
'a'ala'ula	Kaunahipaula	Video: AM	Pālahalaha. Nui ka ula 'ana, kōhu 'ūpi.				
a-ala-ula, limu	MacCaughy 1917	141	Plentiful in shallow water along the reefs.				<i>Codium adhaerens</i> (Cabr.) Agardh; <i>Codium tomentosum</i> (Huds.) Stackh.
a-ala-ula, limu	MacCaughy 1917	142		limu wawae'iole, limu wawae-moa			<i>Codium Muellieri</i> Kuetzing
aalaula, limu	Neal						<i>Codium tomentosum</i> (Huds.) Stackh.
aalaula, limu	Reed	86	Grow far out on the coral reefs or on exposed rocks in the surf. Dropped into hot soup or gravy as it is about to be served. Sometimes are ripened by soaking in fresh water. Often pounded very fine and mixed with pounded salted squid.				<i>Codium adhaerens</i> (Cabr.) Agardh; <i>Codium tomentosum</i> (Huds.) Stackh.
aalaula, limu	Reed	86	Limu wawae'iole or limu wawaimoa are found in use in some places on Hawaii, not common. Grow far out on the coral reefs or on exposed rocks in the surf. Dropped into hot soup or gravy as it is about to be served. Sometimes are ripened by soaking in fresh water.	limu wawae'iole, limu wawaimoa			<i>Codium Muellieri</i> Kuetzing
aalii	Henriques-Peabody	863					
'ai-a-ka-honu	Pukui	10	Same as hulu manu, a seaweed. Lit., food of the turtle.	hulu manu			

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
aka-akoa	Bryan						<i>Ectocarpus</i> sp.
'AKA' AKO'A	Doty	1					<i>Ectocarpus indicus</i> Sonder
'āka'ako'a	Pukui	12	A variety of seaweed.				
aka-akoa, limu	MacCaughy 1917	146	Plentiful along the coasts, in shallow water. Used by them (natives) for food.	limu hulu-ilio			<i>Ectocarpus indicus</i> Sonder
akaakoa, limu	Neal						<i>Ectocarpus</i>
akaakoa, limu	Reed	86		limu bulu'ilio			<i>Ectocarpus indicus?</i> Sonder, <i>Ectocarpus</i> sp.?
'ākala	Pukui	13	Same as kala, a seaweed.	kala		Two endemic raspberries <i>Rubus</i> spp.	
aki-aki	Bryan						<i>Ahnfeldtia</i> sp. J.
akiaki	Setchell	93, 96	Commonly eaten on Hawai'i, eaten with opihi and called Koelele (Kawaihoe)	koelele, ekahakaha (Maui)			<i>Ahnfeldtia Polyides</i> Arsch., <i>A. concinna</i> J. Agardh, <i>A. Gigartinoidea</i> J. Agardh
'AKI' AKI	Doty	1	(Hawai'i)		koelele; ekahakaha (MacCaughy)		<i>Ahnfeldtia concinna</i> J. Ag.; <i>Ahnfeldtia polyides</i> (form of <i>Ahnfeldtia concinna</i> J. Ag.?) fide Reed
'aki'aki	Magruder	37					<i>Ahnfeldtia concinna</i> J. Ag.
'aki'aki	Pukui	14	A kind of coarse red seaweed (<i>Ahnfeldtia concinna</i>) which because of its toughness must be eaten in little bites; a good source of carageenin, a colloid. (KI line 41.) Called 'eleau on Maui.			seashore rush grass (<i>Sporobolus virginicus</i>)	<i>Ahnfeldtia concinna</i> J. Ag.
'aki'aki	Haamio	Audio	Ka 'ai kela a ka honu. 'A'ole 'ai 'ia ma mua. Lohē 'o ia 'ai ka Pilipino. Kupā a mo'a a palupalu. 'A'ole kēlā he 'ai na ka Hawai'i.				
'aki'aki	Howard	Interview	She doesn't eat this limu but it grows all over the rocks in Puna.				<i>Ahnfeldtia concinna</i> J. Ag.
aki-aki, limu	MacCaughy 1917	150	This seaweed is relished by the natives and is commonly sold in the markets	limu eleau			<i>Ahnfeldtia concinna</i> J. Ag.
akiaki, limu	Reed	86	limu eleau on Maui. Grow quite near the tide line along shore, but on exposed black lava rocks in rough water. Occasionally cooked in inau when there was famine or war and taro and sweet potatoes were scarce. Cooked with boiled meats long enough for the gelatin to be softened or dissolved. Substituted for limu huna when cooked with squid or octopus.	limu eleau (Maui only)			<i>Ahnfeldtia concinna</i> J. Ag.

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
akiaki, limu	Chamberlain	32					
'aki'aki, limu	Abbott 1996	29	Baked with chicken or fish in imu.	'eleau and awikiwiki (Maui), limu ko'ele'ele (but name also used for other species like <i>Gymnogongrus</i>).			<i>Ahyaleina concinna</i> J. Ag.
'aki'aki, limu	Abbott 1996	12	Gelatinizes on heating, used in stews or in imu.				
'aki'aki, limu	Garmon	Interview	Used in cursing.				
AKULA	Doty	1	(Chamberlain)				
'AKO'AKO'A	Doty	1	Coral or all jointed corals				
ako'ako'a	Setchell	97	Coral, horned coral in particular, and one or all jointed coralline limu				
AKUILA	Doty	1					<i>Chytocladia rigens</i> (Ag.) J. Ag.
akuila	Pukui	16	Same as KJHE, a red seaweed.	kihe			<i>Chytocladia</i> sp.
akuila, limu	Reed	86		limu kihe			<i>Chytocladia rigens?</i> (Ag.) J. Ag.
akuila, limu	Chamberlain	32					
akuila, limu	MacCaughey 1917	152	An edible species.	limu kihe			<i>Chytocladia rigens</i> (Ag.) J. Ag.
ALAALAULA	Doty	1					<i>Codium Muelleri</i> Kuetzing
alaaula	Henriques-Peabody	863					
alaaula	Setchell	97					Perhaps <i>Codium</i> sp.
alaaula, limu	Chamberlain	32	Chamberlain's list includes Andrew's Dictionary limu names and names from other sources				
ALANI	Doty	1	LIMU MAKE? (Setchell)				<i>Dictyota</i> spp.: <i>D. acutiloba distorta</i> J. Agardh; <i>D. dichotoma</i> (Huds.) Lamour.

LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
aloni	Magruder	41, 42, 45					<i>Dichyota acutiloba</i> J. Agardh, <i>D. bartayressi</i> D. Sandvicensis Sond.-Kuetz.
aloni	Seachell	97	Same as limu make (???)			Pelea plant	
aloni	Pukui	18	Brown seaweeds (<i>Dichyota</i> spp.), regularly divided into narrow segments. They are so bitter that they will taste other seaweeds put with them and can be eaten but little and by some are considered poisonous. Medical kahuna used them in small quantities to treat asthma. This name is sometimes qualified by the terms kai and 'aha. Also maka and false lipoa Cf. Kūlani		maka and false lipoa	Ao O'ahu tree (<i>Pelea sandwicensis</i> or <i>P. sandwensis</i>)	<i>Dichyota</i> spp.
aloni	Henriques-Peabody	863					
aloni, limu	MacGoughy 1917	148	Seldom used for food by the natives, as they are bitter.				<i>Dichyota acutiloba</i> J. Agardh, <i>D. Sandvicensis</i> Sond.-Kuetz, <i>D. spirulata</i> Harv., <i>D. dichotoma</i> (Huds.) Lamx.
aloni, limu	Chamberlain	32					
aloni, limu	Red	86	Sometimes called false limu lipoa, which it resembles slightly. It is eaten but seldom, as it is bitter	false lipoa			<i>Dichyota acutiloba</i> J. Agardh, <i>Dichyota dichotoma</i> (Huds.) Lamx.
aloni, limu	Gorman	Interview	One type is edible and the other is poisonous (and used for swimming fish). Both resemble lipoa but are softer.				
alaula	Seachell	97	Probably alaula	alaula			<i>Codium Muelleri</i> Kuetzing
alaula, limu	Neal						<i>Codium tomentosum</i> (Huds.) Stackh.
alalo, limu	Pukui	207	A limu, <i>Polamogaton pectinatus</i> (pronunciation not certain). Ni'ihau				<i>Polamogaton pectinatus</i>
'anapnapu	Pukui	24	Red seaweeds (<i>Griffithsia</i> spp.); small, stiff, branching, edible plants. Also limu loloa.	limu loloa		Hawaiian soap plant (<i>Colubrina eschscholae</i>)	<i>Griffithsia</i> spp.
'ape'ape'e	Pukui	28	Rare var. of 'ipe'ipe'e, a seaweed.				
AUPUPU	Doty	1					<i>Griffithsia ovalis</i> Harv.?
aupupu	Seachell	97					
aupupu	Henriques-Peabody	863					

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
aupūpū	Pukui	33	Same as mo'opuna-o-ka-lipoa, a common seaweed.	mo'opuna-a-ka-lipoa, mo'opuna		same as makaloa, a shellfish, general name for shellfish with long sharp edges (<i>Thais intermedia</i> , <i>Drupa morum</i>) Also aupūpū, pūpū'awa.	<i>Griffithsia</i> sp.
au-pupu, limu	MacCaughy 1917	154		limu moo-puna, limu ka-lipoa			<i>Griffithsia ovalis</i> Harv.?
aupupu, limu	Chamberlain	32					
aupupu, limu	Reed	87		limu moopuna, limu ka-lipoa			<i>Griffithsia</i> sp.?
awaawa	Henriques-Peabody	863					
awikiwiki	Henriques-Peabody	863					
'AWIKI-WIKI	Doty	1					<i>Gymnogongrus</i> ; <i>G. vermicularis americana</i> J. Ag.; <i>G. disciplinalis</i> (Bory) J. Ag.
'iwikiwiki	Pukui	35	Same as kō'ele'ele.	kō'ele'ele		vine, Canavalia	<i>Gymnogongrus</i>
awiki-wiki, limu	MacCaughy 1917	150		limu ua-ua-loli, limu ekaha-kaha, limu ko-ele-ele, limu nei			<i>Gymnogongrus vermicularis</i> , <i>G. americana</i> , <i>G. disciplinalis</i> (Bory) J. Ag.
awikiwiki, limu	Reed	87	Used in love-making charms in ancient days.	limu uauololi, limu ekahakaha, limu koelele or koele, limu nei			<i>Gymnogongrus vermicularis americana</i> J. Ag., <i>Gymnogongrus disciplinalis</i> J. Ag.
chau	Setchell	97					
chau, limu	Chamberlain	32					
ekaha	Setchell	97				parasitical plant and fern-like plant	<i>Halimeda</i> spp.
EKAHA	Doty	1					<i>Halimeda</i>
EKAHA EKAHA	Doty	2					<i>Gymnogongrus vermicularis americana</i> J. Agardh, <i>G. disciplinalis</i> (Bory) J. Agardh
ekahakaha, limu	Reed	87		limu uauololi, limu koelele or koele, limu awikiwiki, limu nei			<i>Gymnogongrus vermicularis americana</i> J. Ag., <i>Gymnogongrus disciplinalis</i> J. Ag.
Ekahakaha	Abbott 1947	204					<i>Gelidium</i>

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
ekahakaha	Setchell	98	Maui name for Hawai'i's akiaki and koelele				
EKAHAKAHA	Doty	2	(Maui)		akiaki (Hawai'i); koelele (Hawai'i; ex Chamberlain vide Setchell)		<i>Gelidium filicinum</i> Bory; <i>G. pusillum</i> ; ? <i>Abnfeldtia concinna</i> J. Ag.; <i>Gelidium</i> ; <i>Gymnogongrus</i>
ekahakaha	Pukui	39	Var. name for limu loloa and limu uaua loli.	limu loloa, limu uaua loli	limu loloa, limu uaua loli	juvenile or small birds nest fern ('ekaha)	
ekaha-kaha, limu	MacCaughy 1917	150		limu ua-ua-loli, limu ko-ele-ele, limu awiki-wiki, limu nei			<i>Gymnogongrus vermicularis</i> ; <i>G. americana</i> ; <i>G. disciplinaris</i> (Bory) J. Ag.
ekaha-kaha, limu	MacCaughy 1917	150		limu loloa			<i>Gelidium attenuatum</i> , <i>G. corneum</i> , <i>G. filicinum</i> Bory, <i>G. intricatum</i> (J. Agardh) Kuetz., <i>G. lausolum</i> Born., <i>G. cartilagineum</i> (L.) Gaill., <i>G. pusillum</i> (Stackh.) Le Jol.
ekahakaha, limu	Reed	87	Sometimes pounded and mixed with limpets and sometimes cooked with chili peppers and salt.	limu loloa			<i>Gelidium filicinum</i> ? Bory
ekahakaha, limu	Neal						<i>Gelidium</i>
ekahakaha, limu	Chamberlain	32					
eleau	Setchell	98	Found at low tide just above the water. One to two feet long, and is used as a substitute for banana leaves when cooking pig in "native fashion." Only the parts of limu that are smeared on the pig are eaten.				
eleau, limu	Reed	86		limu akiaki			<i>Abnfeldtia concinna</i> J. Agardh
eleau, limu	MacCaughy 1917	150		limu aki-aki			<i>Abnfeldtia concinna</i> J. Agardh
elele	Setchell	98	This limu is always prefixed with the term "limu." (Many other limu are referred to by using only the special designation). Fresh water type lasts two days, salt water lasts a week. Slippery and fragrant, can be smelled from a distance (Puakoolau, Moloka'i).				
elele	Simpson						
ele-ele, limu	MacCaughy 1917	139	Easily gathered, considered edible by the natives. Among the most abundant, most popular, and most widely used of all the edible algae.				<i>Enteromorpha flexuosa</i> (Wulfen) J. Agardh; <i>E. Hapikiri</i> J. Agardh, <i>E. intestinalis</i> (Linnaeus) Link, <i>E. linza</i> (Linnaeus) J. Agardh; <i>E. plumosa</i> (Muller) J. Agardh; <i>E. prolifera</i> (Muller) J. Agardh; <i>E. tubulosa</i> Kuetz., <i>E. compressa</i> (L.) Grv.

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
ele-ele, limu	MacCaughy 1916	476	"the black or dark limu"				<i>Enteromorpha flexuosa</i> (Wulfen) J. Agardh
elele, limu	Neal						<i>Enteromorpha</i>
elele, limu	Reed	86, 87	<p>Grow near the shore. Must always be floated or dipped out of the water into pails because it always grows at the mouth of streams in the quiet brackish water, so is full of silt or sand. Dropped into hot soup or gravy as it is about to be served.</p> <p>Soaked and washed in fresh water, slightly salted, and served uncooked with poi and fish or meats. Sometimes it is ripened by soaking for twenty-four hours or more until it becomes yellowish, slimy, and developed a rank odor.</p> <p>Dried and put on boils or sometimes used fresh and moist to poultice boils. Pounded with limu palawai and salt and tied on cuts and bruises.</p>	limu pipilani			<p><i>Enteromorpha flexuosa</i> (Wulfen) J. Agardh <i>E. Hopkirkii</i> J. Agardh, <i>E. intestinalis</i> (Linnaeus) Link, <i>E. linza</i> (Linnaeus) J. Agardh <i>E. plumosa</i> (Muller) J. Agardh, <i>E. prolifera</i> (Muller) J. Agardh, <i>E. tubulosa</i> Kuetz., <i>E. compressa</i> (L.) Grev.</p>
elele, limu	Miller						<i>Enteromorpha</i>
'ELE-'ELE	Doty	2					<i>Enteromorpha compressa</i> (L.) Grev.; <i>E. intestinalis</i> (Linnaeus) Link
'ELEAU	Doty	2					<i>Ahneyella concinna</i> J. Ag.
'eleau	Pukui	40	Perhaps same as 'aki'aki, a seaweed. Maui.	'aki'aki			<i>Ahneyella concinna</i> J. Ag.
'ele'ele	Ah Quin	Interview	Mullet eat the young 'ele'ele. Awa kalamoho eat the long limu. Laniakea's kau is July - August.				
'ele'ele	Magruder	27					<i>Enteromorpha</i> sp.
'ele'ele	Pukui	40	Long, filamentous, green, edible seaweeds <i>Enteromorpha prolifera</i> . Some kinds are among the most popular in Hawaii, being eaten raw as condiments at feasts. Called pipilani on Maui.	pipilani (Maui)		cooking banana variety, taro, sugar cane, sweet potato	<i>Enteromorpha prolifera</i> (Muller) J. Agardh
'ele'ele, limu	Kaina	Interview	Also limu lauoho.	limu lauoho			
'ele'ele, limu	Kaalakea	Audio	If there is fresh water, get. If there is no fresh water, no limu 'ele'ele.				
'ele'ele, limu	Abbott 1996	13, 17	Cleaned in salt water, then in fresh water and soaked overnight. Add salt.	hulu'ilio			<i>Enteromorpha prolifera</i> (Muller) J. Agardh <i>E. spp.</i> except coarse large ones.

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
'ele'ele, limu	Ewaliko	Audio	\$4/quart, limu 'ele'ele, ho'okomo i loko o ka stew meat. Nui kan o ka limu, 'ehua manawa o ka makahiki, puka mai kēia limu. When ua, wash all the dirt, pau ka lepo, a laila ulu mai ka limu, ma' ma'e. Huki me ka limu a ho'oma'ema'e. Luhī ka hana 'ana. Aia a miko, 'ono. 'A'ole 'aia ka limu i kēia mau lā, nui nā mea o ke kahawai e holo nei. I pule ka waiho 'ana i loko o ka 'ōmole ma ka pahu hau. Have to freeze it after. Uliuli, 'o ia ka pololei. Pala mai ma hope (hākeake mai). 'Oī aku ka ululi ma mua o ka pala. 'O ka mea hou ka mea pokopoko. Ma Kahala Hilton.				
'ele'ele, limu	Kauahipoula	Video: 'AM	Ke kau ka limu 'ele'ele, loloa.				
'ele'ele, limu	Garnon	Interview	This limu likes to grow where there is some flow in the water (fresh). You collect it by pinching a little at a time so it doesn't get sandy.				
'ele'ele, limu	Aiona	Interview	My dad told me about his mother picking 'ele'ele and that when they went to pick it, they needed to do it VERY carefully so no sand would be mixed in with it. She would give them lickings if it were sandy.				
'ele'ele, limu	Howard	Interview	She picks up this limu at Punahū Beach, growing on the rocks and in the sand at the intertidal area (where the freshwater springs are).				<i>Eneromorpha prolifera</i> (Muller) J. Agardh
elele maoli	Henriques-Peabody	863					
cioelo	Henriques-Peabody	863					
ehula	Henriques-Peabody	863					
enenue limu	Diego	Interview	Red with leaves, skinny on bottom and branching on top, smooth. Also called turtle limu				
General Limu	Hania	Audio	'A'ole nui loa i kēia manawa. Kāpulu kahakai, lepo. Ma mua, kapu kahakai, 'a'ole kāpulu 'ia. Ma mua he wahi no ka 'au'au, 'a'ole 'au'au ma nā 'ano wahi like 'ole.				
General Limu	Ellis	Video: 'AM	Remembers eating 'ele'ele, lipoa, lipo'epe'e, limu wawae'iole.				
General Limu		Video: 'AM	A list is prepared of limu: limu kolu, limu lipoa, limu 'ele'ele, limu manaua, limu kala, limu lipo'epe'e, limu wawae'iole, limu huluhuluwaena, limu 'opihī.				
General Limu	Kaanana	Video: 'AM	'Ako i ka limu.				
General Limu	Serrano	Video: 'AM	Remembers eating kolu, 'ele'ele, manaua, lipoa, lipo'epe'e. If you huki the limu it will be gone, 'ohi limu is the correct way. Lipoa is eaten with fish, lipo'epe'e is salted and eaten with poi or 'ōpelo. These days there isn't limu like before.				

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
General Limu	Kaina	Interview	Maka' alae is the main spot for limu in Hāna. Hāna does not have certain limu like Lahaina side like huluhuluwaena, ogo, etc. Those types of limu like dirty water, where Hāna has clean water. Lots of rain makes the limu grow long. The 'ōpū of the enemie has limu that you can rinse and eat with poke.				
General Limu	Keohokalole	Video: AM	'Ōhi limu ke ma'ema'e ke kai. Kai nui, nui ka lepo. Nui ka limu ma Kāne' ōhe. Remembers 'ele'ele and huluhuluwaena.				
General limu	Al Quin	Interview	Manawea, waiwai' eole, li peepee, kolu, lipoa, hulu hulu waina, maneo neo, owaka waka, kula, opūhi (2 types), node, ribbon. Kau - season thereof. Kihei - Garden of Eden. Turtle feed from July to September at Kawaihou, O'ahu. Pollution and overharvesting changed the limu. His kumu was mostly Helen Ho'opi'i Kenolio - "Limu Lady of Maui" - Kihei. Foreign limu is taking over the reefs. When gutting fish, you can observe the types of limu that fish eat.				
General limu	Kaalahea	Audio	Kopekope i ka limu a hana po'opo'o. 'Ōko'a ka limu i kēia manawa.				
HANA	Doty	2					<i>Hypnea armata</i> (Mert.) J. Agardh
hana, limu	MacCaughy 1917	151	Among the most commonly eaten of the Hawai'ian seaweeds. Especially relished when boiled with octopus.				<i>Hypnea armata</i> (Mert.) J. Agardh
HA'ULA	Doty	2	(very rare, Maui)				<i>Nitophyllum?</i>
hā'ula	Pukui	61	See limu hā'ula.		limu hā'ula		
hauia, limu	Reed	88	Very rare, only one small specimen obtained from a native on Maui.				<i>Nitophyllum?</i>
hā'ula, limu	Pukui	207	a red seaweed (<i>Martensia fragilis</i>).				<i>Martensia fragilis</i> Harvey
hā'ulelani	Pukui	61	A fresh-water alga found in taro patches.				
hauelani, limu	Reed	67	Found in the cool, swift mountain streams or pools.				
HAWANE	Doty	2					<i>Polysiphonia mollis</i> Hooker et Harvey ex Harvey 1847, <i>Streblodactylus?</i>
hawane	Pukui	62	A small, fine, red seaweed (<i>Polysiphonia</i> spp.), consisting of branching filaments forming dense tufts.			Nut of the loulū, considered delicious to eat. Also the tree itself.	<i>Polysiphonia</i> spp.
hawane, limu	Reed	88					<i>Streblodactylus?</i>

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
hawane, limu	Reed	88		limu pualu			<i>Polysiphonia mollis</i> Hooker et Harvey ex Harvey 1847
hawane, limu	MacCaughy 1917	154		limu pa-ala			<i>Polysiphonia mollis</i> Hooker et Harvey ex Harvey 1847
hinakea	Haanio	Audio	Limu kama'aina o Kona. Ulu palaha ma ka pohaku pahoehoe. Kopekope me ka pahi, ku'i i ka hale. Limu kai kēlā, 'a'ole 'ai pa'a like me ka līpe'epe'e..." 'A'ala 'ono.				
hinaula	Setchell	98					
hinaula	Haanio	Audio	Limu kama'aina o Kona. Ulu palaha ma ka pohaku pahoehoe. Kopekope me ka pahi, ku'i i ka hale. Limu kai kēlā, 'a'ole 'ai pa'a like me ka līpe'epe'e..." 'A'ala 'ono.				
hinaula	Henriques-Peabody	863					
HINA'ULA	Doty	2	(Chamberlain)				
hina'ula	Pukui	71	A kind of seaweed.				
hinaula, limu	Chamberlain	32					
holoāwai, limu	Pukui	207	A fresh water moss.				
HOLOMOKU	Doty	2	(Chamberlain)				
holomoka	Setchell	99					
holomoka, limu	Chamberlain	32					
HONA	Doty	2					<i>Hypnea nidifica</i> J. Agardh
hona	Setchell	99		limu huna			<i>Hypnea nidifica</i> J. Agardh
honū (limu honu), limu	Abbot 1996	11	Limu kala is known to be eaten by turtles, probably accounting for the name limu honū.	limu kala			<i>Sargassum</i> spp.
hoomunu	Setchell	99					<i>Laurencia obtusa</i> var. <i>racemosa</i> (Huds.) Lamx.

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
HO'ONUNU	Doty	2	(Puna, Hawai'i)				<i>Laurencia obtusa</i> var. <i>racemosa</i> (Huds.) Lamx.
ho'onunu	Pukui	273	A seaweed (<i>Laurencia obtusa</i> var. <i>racemosa</i>). Cf. Iipe'e.				<i>Laurencia obtusa</i> var. <i>racemosa</i> (Huds.) Lamx.
huahukai	Setchell	99					
hu'ahu'a kai	Pukui	84	A variety of seaweed.				
HU'AHU'AKAI	Doty	2	sponge (ex Chamberlain fide Setchell)				
huahukai, limu	Chamberlain	32					
hūai, hūwai	Pukui	84	A kind of seaweed (<i>Codium</i>).			A shellfish of the hūhūwai family	<i>Codium</i>
HULU	Doty	2					<i>Ceramium clavulatum</i> Agardh; <i>Centroceras clavulatum</i> (C. Agardh) Montagne
hulu	Pukui	90	Same as hulu 'īio, nahawele, pāhūtuhulu, a seaweed.	hulu 'īio, nahawele, pāhūtuhulu			
hulu, limu	MacCaughy 1917	154		limu hulu-īio, limu hulu wawae-īole			<i>Ceramium clavulatum</i> Agardh
hulu, limu	Reed	86		limu hulu-īio, limu hulu wawae-īole			<i>Centroceras clavulatum</i> (C. Agardh) Montagne
huluhulu	Pukui	90	Kinds of seaweeds and mosses.				
huluhulu-a-īole	Pukui	90	Same as hulu 'īole.	hulu 'īole			
huluhulu waena	Pukui	90	An irregularly branching, dark-red seaweed (<i>Grateloupia filicina</i>) with many narrow segments. It is commonly eaten and is sold in some markets. Also pukele-wa'a.	pukele-a-wa'a			
HULUHULUWAENA	Doty	2	(all but Kaula'i)				<i>Grateloupia filicina</i> (Lamoroux) C. Agardh
Huluhuluwaena	Abbott 1947	206	(Hawaii)				<i>Grateloupia</i>
huluhuluwaena	Magnuder	73					<i>Grateloupia filicina</i> (Lamoroux) C. Agardh

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
huluhuluwaena	Ah Quin	Interview	With ake. With squid.				
huluhuluwaena	Kaialakea	Audio	Mixed with ake.				
huluhuluwaena	Ewaliko	Audio	Ma Kahala Hikoi. Uka pi me ka limu uliuli. Ho'ohui 'ia me ke ake. I kailani huluhuluwaena, 5 kailani ake. 'Ula'ula kēia limu.				
huluhuluwaena	Kaina	Interview	Mixed with ake.				
huluhuluwaena	Setchell	93, 95, 99	Hair-like limu. Eaten with opihī in Hilo.	Pakaleawaa (Maui)			<i>Grateloupia filicina</i> (Lamouroux) C. Agardh
huluhuluwaena	Garmon	Interview	Grows on coral. Her grandmother was the "ake person" of her time - she was famous for making the huluhuluwaena with ake (raw beef liver) for everyone. Then her mother (Aunt Edith) became the "ake person".				
hulu-hulu-waena, limu	MacCaughey 1917	154	This name is used on Hawai'i. Both names are used on the intermediate islands.	limu paka-cle-awa'a			<i>Grateloupia filicina</i> (Lamouroux) C. Agardh
huluhuluwaena, limu	Neal						<i>Grateloupia filicina</i> (Lamouroux) C. Agardh
huluhuluwaena, limu	Abbott 1996	9, 13, 25	Cleaned in salt water, then in fresh water and chopped. Add salt. Transplanted from Honokowai, Lahaina Maui (E. Williamson) or by Mrs. Sam Nowlein from Moloka'i to Waikiki for Lili'unkalani. Brought to Waikiki for Lili'u from either Honokowai, Maui or Moloka'i.	pakaleawaa'o (Maui and Moloka'i), ake limu (most common used with ake).			<i>Grateloupia filicina</i> (Lamouroux) C. Agardh
huluhuluwaena, limu	Reed	87	This name is in very general use on Hawaii and Maui, but both names are common on Oahu. Grow near the shore.	limu pakaleawaa			<i>Grateloupia filicina</i> (Lamouroux) C. Agardh
huluhuluwaena, limu	Howard	Interview	Picks up this limu at Punahoa Beach (Hawai'i) growing in the shallow area in the sand (where there is fresh water springs under ground).			Gra	<i>Grateloupia filicina</i> (Lamouroux) C. Agardh
huluhulu wahine	Henriques-Peabody	863					
hulu 'i	Henriques-Peabody	863					
hulu 'i	Pukui	90	A kind of seaweed.				
hulu-ilio	Bryan						<i>Cladophora</i>
hulu-ilio	Bryan						<i>Ectocarpus</i>

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
HULU-ILIO	Doty	2					<i>Cladophora nitida</i> Kuetz. or <i>Chaetomorpha antennina</i> (Bory) Kütz. <i>Jania rubens</i> ; <i>Stigeoclonium amoenum</i> Kuetz.; <i>Centroceras clavulatum</i> (C. Agardh) Montagne; <i>Ectocarpus</i> spp.; <i>Ceramium clavulatum</i> Agardh; <i>Ectocarpus indicus</i> Sonder
hulu ilio	Henriques-Peabody	863					
hulu 'ilio	Pukui	90	A fine, unbranched, green seaweed (<i>Chaetomorpha antennina</i>), looking much like <i>Cladophora nitida</i> . Also 'Ilio, nahaweke.		Also 'Ilio, nahaweke		<i>Chaetomorpha antennina</i> (Bory) Kütz.
hulu 'ilio	Pukui	90	A fine, nonedible, brown seaweed (<i>Sphacelaria tribuloides</i>), densely tufted, shorter and darker brown than <i>Ectocarpus</i>				<i>Sphacelaria tribuloides</i>
hulu 'ilio	Pukui	90	Some kinds of <i>Polysiphonia</i> seaweeds				<i>Polysiphonia</i>
hulu 'ilio	Pukui	90	A fine, fleshy, green, fresh-water alga (<i>Stigeoclonium amoenum</i>), found in streams and ditches; said to be edible				<i>Stigeoclonium amoenum</i> Kuetz.
hulu 'ilio	Pukui	90	A fine, red seaweed (<i>Centroceras clavulatum</i>), forming short, dense, regularly branching tufts, with tiny forked tips; not edible. Also hulu, pūhuluhulu, wāwae'iole. Lit., dog fur		Also hulu, pūhuluhulu, wāwae'iole		<i>Centroceras clavulatum</i> (C. Agardh) Montagne
hulu 'ilio	Pukui	90	Fine, branching, edible brown seaweeds (<i>Ectocarpus</i> spp.), forming short, olive-brown clumps				<i>Ectocarpus</i> spp.
hulu 'ilio	Pukui	90	A fine, branching, green seaweed (<i>Cladophora nitida</i>), forming flexible, long, bright-green tufts; said to be edible				<i>Cladophora nitida</i> Kuetz.
hulailio	Setchell	99					<i>Jania rubens</i>
hulu-ilio, limu	MacCaughy 1917	141	This and several other species are used locally by the natives for food, chiefly on Maui and Hawai'i.	limu ilio, limu manu			<i>Cladophora antennina</i> (Bory) Kuetz.
hulu-ilio, limu	MacCaughy 1917	141	Sometimes used for food.				<i>Cladophora nitida</i> Kuetz.
hulu-ilio, limu	MacCaughy 1917	146		limu aka-akoa			<i>Ectocarpus indicus</i> Sonder
hulu-ilio, limu	MacCaughy 1917	139	Grows in brackish ponds by the sea; eaten by only a few natives, a cosmopolitan of species with many varieties.				<i>Stigeoclonium amoenum</i> Kuetz.
hulu-ilio, limu	MacCaughy 1917	154		limu hulu, limu hulu wawae'iole			<i>Ceramium clavulatum</i> Agardh
hulu'ilio	Magruder	45					<i>Giffordia brevarticulata</i>

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
hulu'ilio	Garmon	Interview	This limu is soft like wool (recognized from picture in Magruder book).				
hulu'ilio, limu	Neal						<i>Ectocarpus</i>
hulu'ilio, limu	Reed	86	Not widely used, only local on several islands, chiefly on Hawaii and Maui, and this name is applied to several species slightly resembling each other. It means dog's hair. Grow near the shore.	limu hulu, limu hulu wawae-iole			<i>Centroceras clavulatum</i> (C. Agardh) Montagne
hulu'ilio, limu	Reed	86	Grow near the shore.	limu ilio, limu manu			<i>Chaetomorpha antennina</i> (Bory) Kützinger
hulu'ilio, limu	Reed	86	Grow near the shore.	limu aksakoa			<i>Ectocarpus indicus</i> ? Sonder, <i>Ectocarpus</i> sp.?
hulu'ilio, limu	Reed	88	This grows in brackish water pools by the sea and is eaten by only a few Hawaiians. Grow near the shore.				<i>Stigeoclonium</i> sp.?
hulu'ilio, limu	Reed	86					<i>Cladophora noida</i> Kuetz.
hulu'ilio, limu	Chamberlain	32					
hulu manu	Pukui	90	Green seaweeds (<i>Caulerpa</i> spp.), growing like land plants, with roots, prostrate stems, and leaflike divided fronds; not edible. Also 'ai-a-ka-bonu, hulu moa, limoa.		'ai-a-ka-honu, hulu moa, limoa		<i>Caulerpa</i> spp.
hulu moa	Pukui	90	Same as hulu manu.	hulu manu			
hulu pua'a	Pukui	90	A small, matted red seaweed (<i>Spyridia spinella</i>), its many branches covered with short bristles. It is rather common in shallow water near shore. It is eaten in South Hawaii, but not generally elsewhere.				<i>Spyridia spinella</i>
HULUPUA'A	Doty	3	(S. Hawaii)				<i>Spyridia spinella</i>
hulupuaa, limu	Reed	88	Not in general use, but eaten in the southern part of Hawaii.				<i>Spyridia spinella</i>
HULUWAWAE-IOLE	Doty	3	(Reed)				<i>Centroceras clavulatum</i> (C. Agardh) Montagne
hulu wawae-iole, limu	MacCaughy 1917	154		limu hulu-ilio, limu hulu			<i>Ceramium clavulatum</i> Agardh
hulu wawae-iole, limu	Reed	86		limu hulu'ilio, limu hulu			<i>Centroceras clavulatum</i> (C. Agardh) Montagne
HUNA	Doty	3	(Kona, Oahu, Kauai, Molokai)				<i>Hypnea armata</i> (Mert.) J. Agardh; <i>Hypnea nidifica</i> J. Agardh

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
huna	Magruder	79					<i>Hypnea cervicornis</i> J. Agardh
huna	Bryan		(See Oahu, Kauai, Molokai)				<i>Hypnea</i>
huna	Pukui	91	Common, fine, red seaweeds (<i>Hypnea</i> spp.), irregularly and more or less densely branching, thorny looking; eaten cooked, furnishes a good colloid when boiled.				<i>Hypnea</i> spp.
huna	Setchell	100	Stewed with meat.	limu huna			<i>Hypnea nidifica</i> J. Agardh
huna	Garnon	Interview	Doesn't eat this type of limu (recognized from picture in Magruder book).				
huna, limu	Neal						<i>Hypnea</i>
huna, limu	MacCaughey 1916	476	"the concealed or hidden limu"				<i>Hypnea</i> sp.
huna, limu	Chamberlain	32					
huna, limu	Abbott 1996	12	Gelatinizes on heating, used in stews or in imu.				
huna, limu	Reed	87	Found drifted on sand or rocks. Grow near the shore. Occasionally cooked in imu when there was famine or war and taro and sweet potatoes were scarce. Cooked with boiled meats long enough for the gelatin to be softened or dissolved. Especially prized for boiling with squid or octopus. Sometimes boiled and the hot infusion given for stomach ache.				<i>Hypnea nidifica</i> J. Agardh, <i>Hypnea armata</i> (Mert.) J. Agardh
HUNE	Doty	3					<i>Hypnea nidifica</i> J. Agardh
hune	Setchell	100					
hune, limu	Chamberlain	32					
HUNEHUNE	Doty	3	(Chamberlain)				
hunehune	Setchell	100					
hunehune	Pukui	91	Same as huna, a seaweed.	huna			<i>Hypnea</i> spp.

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
hanehane, limu	Chamberlain	32					
hūpēkoholā	Pukui	92	A variety of seaweed.				
huwae	Setchell	100	Perhaps spelled huwai. Expanded species of <i>Codium</i>	huwai?			<i>Codium spongiosum</i> Harvey
HUWAI	Doty	3					<i>Codium spongiosum</i> Harvey
IHAU	Doty	1	(Chamberlain)				
'i	Henriques-Peabody	863					
iliau	Kaina	Interview	Lawalu or boiled and then fed to the enemy. It gives them diarrhea. Come back 1-2 days later and hook them with the same limu tied to the hook. Also gives pig diarrhea. If in the sun, turns yellow.				
ilio	Bryan						<i>Cladophora</i>
ilio, limu	MacCaughy 1917	141		limu hulu-ilio, limu manu			<i>Cladophora antevina</i> (Bory) Kuetz.
ilio, limu	Reed	86		limu huluilio, limu manu			<i>Chaetomorpha antennina</i> (Bory) Kützing
'ILIO	Doty	3					<i>Chaetomorpha antennina</i> (Bory) Kützing; <i>Cladophora</i>
'lilo	Pukui	99	A seaweed, same as some of the hulu 'lilo 5 <i>Chaetomorpha antennina</i>)	hulu 'lilo			<i>Chaetomorpha antennina</i> (Bory) Kützing
ILIOHA	Doty	3	Probably = ILIOHAA.				<i>Ulva</i>
lioha	Setchell	100	Species of limu with broad leaves; the limu lau palahalaha				Probably <i>Ulva</i> sp.
'lioha'a	Pukui	99	Same as lipahapaha, pahapaha, sea lettuce (<i>Ulva</i> and related genera)	lipahapaha, pahapaha, sea lettuce (<i>Ulva</i> and related genera)			<i>Ulva</i> and related genera
liohaa, limu	Chamberlain	32					
KA KANAKA	Doty	3	or KA-KANAKA-O-MANU'AKEPA (Hanalei, Kaula')				

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
kā-kanaka, limu	Pukui	207	A soft, sometimes gelatinous blue-green alga (<i>Nostoc commune</i>) sometimes covering the ground in the wet season as small slippery balls, especially at Hanalei, Kaua'i. Also limu kā-kanaka-o-Manu'akepa. Lit., man-striking moss, so called because people are said to slip on it and fall.		Also limu kā-kanaka-o-Manu'akepa		
KAHAKALA	Doty	3	(Chamberlain)				
kahakala	Setchell	100					
kahakala, limu	Chamberlain	32					
kāhili	Pukui	112	A seaweed, probably <i>Turbinaria ornata</i> .				<i>Turbinaria ornata</i> (Turner) J. Agardh
kāhili	Garrison	Interview	This is the really tough (limu that looks like a kāhili (<i>Turbinaria ornata</i>)).				<i>Turbinaria ornata</i> (Turner) J. Agardh
KALA	Doty	3					<i>Sargassum</i> spp.: <i>Sargassum echinocarpum</i> J. Agardh; <i>Sargassum cymosum</i> Agardh; <i>Sargassum polyphyllum</i> J. Agardh; <i>Turbinaria</i>
kāla	Ah Quin	Interview	Enenue feed on kala, ribbon, etc.				
kala	Magruder	51, 53					<i>Sargassum echinocarpum</i> J. Agardh, <i>S. obtusifolium</i> J. Agardh, <i>S. polyphyllum</i> J. Agardh
kala	Pukui	120	See limu kala, seaweeds. For a pun on kala (plant and limu) see Neal 367.		limu kala	Surgeonfish, unicorn fish, Teuthidae: same as pua kala, prickly poppy; sweet potato, qualified with ke'oke'o and poni; same as 'ikala; same as pākalakala, a tern	
kala	Bryan						<i>Sargassum</i>
kala	Setchell	100	Always prefixed by the word limu. Ceremonial use of purification. Some say it is eaten, others disagree.				<i>Sargassum echinocarpum</i> J. Agardh, <i>Turbinaria ornata</i> (Turner) J. Agardh
kala	Simpson						
kala, limu	MacCaughy 1917	147	Are used for food (by natives).				<i>Sargassum obtusifolium</i> J. Agardh, <i>S. polyphyllum</i> J. Agardh, <i>S. densum</i> Dickie, <i>S. unctum</i> Dickie, <i>S. echinocarpum</i> J. Agardh, <i>S. cymosum</i> Ag.

LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
kala, limu	Handy	215	Common, coarse, yellowish brown seaweed with small spiny leaves and round "berries". It is edible though coarse; it is named kala (spine) because of the little spines on the leaves (which look like miniature holly leaves). Because kala also means "to loosen", this seaweed has many ceremonial uses. Thus, when a convalescent wants to be freed from all vestiges of his disease, he makes a lei of kala seaweed and swims seaward with it round his neck, allowing the waves to wash it off- within will be "loosened" the guilt of other evils causing the illness. Riddle: Ke kala o uka. Ke kala o wana. Ke kala o ka. Answer: A kala berry, the pua kala, and the limu kala.				
kala, limu	Neal						<i>Sargassum echinocarpum</i> J. Agardh, <i>S. cynosuroides</i> Ag., <i>S. polyphyllum</i> J. Agardh
kala, limu	Abbott 1996	11	Ho'oponopono (eat the limu when you), purification (water, 'olena, limu kala). Let worn by <i>Tolerant Lumbare</i> for a kala bee.				<i>Sargassum</i> spp.
kala, limu	Pohai	207	Common, long, brown seaweeds (<i>Sargassum echinocarpum</i>), their stems covered with short branches, bearing rather stiff, twisted, more or less toothed, narrow leaves. Rarely eaten raw because of toughness (though edible), used in ceremonies to drive away sickness and to obtain forgiveness. May be qualified by terms lau ki'i or lau au. Also 'ikala.	'ikala	Also 'ikala		
kala, limu	Reed	88	Found drifted on sand or rocks. Dropped into hot soup or gravy as it is about to be served. Sometimes are ripened by soaking in fresh water. Leaves are separated from stems and floats, as only leaves are eaten. More often eaten fresh without any preparation (with raw fish or squid). Sometimes broken into small pieces and soaked in fresh water till dark and soft, then stuffed into salmon before roasting or chopped with fish heads and eel. Sometimes ripened in water with leho and salt for a few days before eating. Can be pounded with salt and bound about bruises and cuts to relieve pain. Used in ceremony for illness.				<i>Sargassum echinocarpum</i> J. Agardh, <i>S. cynosuroides</i> Ag., <i>S. polyphyllum</i> J. Agardh
kala, limu	Henriques-Pedbody	863					
kala, limu	Kaina	Interview	Certain type is eaten. Some people cook it to soften it.				
kala, limu	Ewaliko	Audio	'A, 'ole 'ai' in, he mamua a he fa' au. Kakaia po e 'oki 'oki a 'ai.				
kala, limu	Tilden	133	Fronds of these two species are ground up into bits and mixed with raw fish torn into small shreds. Boiled with squid, they also regarded it as a great delicacy.				<i>Sargassum</i>
kala, limu	Chamberlain	32					
kala, limu	Seachell	96	Atonelement limu, ceremonial use, lei.				

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
kala, limu	Abbott 1996	23	Eaten by palani, enenue, kala. Used for bait. Two types - kala-launui, kala-louli i	limu honu			<i>Sargassum echinocarpum</i> J. Agardh
kala, limu	Garmon	Interview	Never ate limu kala, it was used ceremonially.				
kala, limu	Kaanaa	Interview	According to the old stories, the kikiini (the chief's fastest runners) would use limu kala to wrap living fish that the chief desired and bring them long distances to the chief (and it would still be living).				
kala, limu	Howard	Interview	She doesn't eat this one.				<i>Sargassum echinocarpum</i> J. Agardh
kala wai	Pukui	122	See limu kala wai.		See limu kala wai		
kala wai, limu	Pukui	207	One or more kinds of dark green, slippery fresh-water algae (usually <i>Spirogyra</i> spp.) consisting of rows of cylindrical cells in unbranched filaments, common to fresh-water rivulets, dripping places, and taro patches. Also palawai.		Also palawai		<i>Spirogyra</i> spp.
KALA-LAU-LI'ILI'I	Doty	3	(Chamberlain fide Setchell)				
kalalaulilii	Setchell	101					
kalalaulilii, limu	Chamberlain	32					
KALALAUNUINUI	Doty	3	Probably = to KALA-LAU-NUI or NUNUI. NUNUI is pidgin				<i>Sargassum echinocarpum</i> J. Agardh
kalalaunuinui	Setchell	101					
kalalaunuinui, limu	Chamberlain	32					
KALAWAI	Doty	3	(a flowering plant)				<i>Nais major</i>
kalawai, limu	Reed	76	Often called fresh-water limu kala. Used as a love potion by saying a magic spell learned from a kahuna, eating the limu and giving some to the desired person.				
kanalos, limu	Kapuhalehua	Interview	A type of edible limu.				
KALIPOA	Doty	3					<i>Griffithsia ovalis</i> Harv.?
ka-lipoa, limu	Neal						<i>Griffithsia</i>

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
ka-lipoa, limu	Reed	87	This alga is considered a delicacy on Maui and southern Hawaii, but is very scarce and spoils very soon, so have not been able to secure enough to identify the species	limu moopuna, limu supupu			<i>Griffithsia</i> sp.?
ka-lipoa, limu	MacCaughy 1917	154		limu moo-puna, limu au-pupu			<i>Griffithsia ovalis</i> Harv.?
KAU-PAU	Doty	3					<i>Chnoospora fastigata pacifica</i> J. Ag.
kauna'oa	Pukui	138	A coarse, tough seaweed (<i>Galaxaura rugosa</i>), calcified and inedible, resembling kauna'oa (<i>Cuscuta sandwichiana</i>) in being yellow to gold in color.	kauno'a, 'okala		native dodder, mollusk (Vermetidae)	<i>Galaxaura rugosa</i> (Ellis et Solander) Lamoroux
kaunoa	Setchell	102				a worm that causes universal withering of trees and herbs; dodder	<i>Galaxaura rugosa</i> (Ellis et Solander) Lamoroux
KAUNO'A	Doty	3					<i>Galaxaura rugosa</i> (Ellis et Solander) Lamoroux
kauno'a	Pukui	138	A rough seaweed (<i>Galaxaura rugosa</i>). Cf. pākālākala.	'okala, kauna'oa	Cf. pākālākala.	native dodder, mollusk (Vermetidae)	<i>Galaxaura rugosa</i> (Ellis et Solander) Lamoroux
kaupau	Pukui	139	An edible brown seaweed (<i>Chnoospora pacifica</i>), with many slender branches. Also wāwahiwa'a	wāwahiwa'a	Also wāwahiwa'a		<i>Chnoospora pacifica</i> J. Agardh
kau-pau, limu	MacCaughy 1917	148		limu wa-wahi-wa'a			<i>Chnoospora fastigata pacifica</i> J. Agardh
kaupau, limu	Reed	86		limu wawahiwa'a			<i>Chnoospora fastigata pacifica</i> J. Ag.
KEKUWELU	Doty	3	Probably = KE KUWELU				<i>Gelidium</i> spp?
kekuwehu, limu	Reed	87		limu kuwelu			<i>Gelidium</i> sp.?
KELE	Doty	3	(Chamberlain)				
kele	Setchell	102					
kele, limu	Chamberlain	32					
KIHE	Doty	3					<i>Chyloclada rigens</i> (Ag.) J. Ag.
kihe	Henriques-Peabody	863					

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
kihe	Pukui	147	A red seaweed (<i>Chytocladia</i> sp.) with narrow cylindrical, branching stems. Also akuila.	akuila		A small native fern (<i>Xiphopteris suffordii</i>); a variety of sweet potato	<i>Chytocladia</i> sp.
kihe	Haario	Audio	'Ai me ka 'opihi, i'a mako. Limu kama'kina o Kona. Limu kai kēā, 'a'ole 'ai pa'a like me ka līpe'epe'e...' 'A'ala, 'ono.				
kihe, limu	MacCaughy 1917	152		limu akuila			<i>Chytocladia rigens</i> (Ag.) J. Ag.
kihe, limu	Reed	86		limu akuila			<i>Chytocladia rigens?</i> (Ag.) J. Ag.
KIKALA	Doty	3					<i>Centroceras clavulatum</i> (C. Agardh) Montagne
kikala	Setchell	102					<i>Centroceras clavulatum</i> (C. Agardh) Montagne
KIKI	Doty	3	(Chamberlain)				
kiki	Setchell	102					
kikā	Pukui	149	A seaweed.			A bird resembling a plover; name given a shellfish.	
kiki, limu	Chamberlain	32					
kimau	Henriques-Peabody	863					
KIPA-AKAI	Doty	3	Probably = to LI PAAKAI				<i>Asporogopsis sanfordiana</i> Harv.
KO'ELE	Doty	3	(Reed). See KOELELE				
kō'ele	Pukui	158	Same as kō'ele'ele.	kō'ele'ele		any variety of large, tough 'opihi	<i>Gymnogongrus</i>
kō'ele	Howard	Interview	She picks up this limu at a place called laupapa 'ōhua (reef with manini fish babies). This limu is eaten with 'opihi.	kō'ele'ele			<i>Ahnfeltiopsis flabelliformis</i> (Harvey) Masuda
kō'ele, limu	Ellis	Video: AM	Uana. Ulu me ka hā'uke'uke.				
koele, limu	MacCaughy 1916	476	"the dry or hard limu"				<i>Gymnogongrus</i> sp.

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
koele, limu	Reed	87		limu uaufofo, limu ekahakaha, limu koelele, limu awikiwiki, limu nei			<i>Gymnogongrus vermicularis americana</i> J. Ag., <i>Gymnogongrus disciplinalis</i> (Bory) J. Ag.
koelele	Setchell	102	Name used without term limu attached. Dwarfed and undeveloped form of <i>Gymnogongrus</i> . May be an alternate name for akiaki.	akiaki			<i>Gymnogongrus</i> sp.
koelele	Henriques-Peabody	863					
KO'ELE'ELE	Doty	3	See KOELE (Reed); see AKIAKI				<i>Gymnogongrus</i> , <i>Gymnogongrus vermicularis americana</i> J. Ag.; <i>Gymnogongrus disciplinalis</i> (Bory) J. Ag.
kō'ele'ele	Pukui	158	Small, red edible seaweeds (<i>Gymnogongrus</i> spp.) [<i>Gymnogongrus</i> ?] with rather thick, flattened stems and branches.	kō'ele, nei, 'āwikiwiki	'āwikiwiki, 'ēkahakaha, kō'ele, limu uau soli, nei		<i>Gymnogongrus</i>
kō'ele'ele	Howard	Interview	She picks up this limu at a place called laupapa 'ōhua (reef with manini fish babies). This limu is eaten with 'opihi.	kō'ele			<i>Ahnfeltiopsis flabelliformis</i> (Harvey) Masuda
ku-ele-ele, limu	MacCaughey 1917	150		limu ua-ua-fofo, limu ekaha-kaha, limu awiki-wiki, limu nei			<i>Gymnogongrus vermicularis</i> , <i>G. americana</i> , <i>G. disciplinalis</i> (Bory) J. Ag.
koelele, limu	Chamberlain	32					
koelele, limu	Reed	87		limu uaufofo, limu ekahakaha, koele, limu awikiwiki, limu nei			<i>Gymnogongrus vermicularis americana</i> J. Ag., <i>Gymnogongrus disciplinalis</i> (Bory) J. Ag.
KOHU	Doty	3					<i>Asparagopsis sanfordiana</i> Harv.
kohu	Al Quin	Interview	Color and iodine depends on area gathered. November, April is kau. Red one has low iodine.				
kohu	Magruder	59					<i>Asparagopsis taxiformis</i> (Delile) Trevisan
kohu	Setchell	103	Always prefixed by the word limu. Kohu means to color or stain. "One year limu"	limu koko, lipaakai (Maui)			<i>Asparagopsis sanfordiana</i> Harv.
kohu	Bryan						<i>Asparagopsis sanfordiana</i> Harv.
kohu	Miller						
kohu, limu	Kaina	Interview	The best. Crisp, strong smell. Lots of rain makes limu grow, the kohu can get really long.				
kohu, limu	Peepee	Video: TME	Mo'omomi has the best limu kohu. There are two ways to pick limu: cutting, pulling but leaving the roots behind.				

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
kohu, limu	Ēwafiko	Audio	\$20' ōmole (quart), limu kohu. Aia i waho loa kēia limu, 'ula'ula. Wae 'ia ka mea a pau a ho'okū i loko o ka wai pa'akai. I kekahi lā, helele i mai ka lepo a pau loa. A ma'ema'e, 'oki'oki a kōpi hou. Ke huki mai 'oe, hemo pū mui nō me ke one, a lawe 'oe i ka mea o lalo aia ka limu i luna. 'O lalo, aia i laila ke kumu.				
kohu, limu	Wong	Interview	About four days after it rains, you can go get the limu kohu. This is the main limu eaten on Ni'ihau.				
kohu, limu	Kaunahipaula	Video: 'AM	Huki i ka limu kohu.				
kohu, limu	Reed	86	This limu is usually called limu kohu, except on Maui, Molokai, and Kauai. It is often called limu lipaakai and sometimes limu lipehu. Limu koko is a corruption of kohu. Grow far out on the coral reefs or on exposed rocks in the surf. Dropped into hot soup or gravy as it is about to be served. Always pounded well as its being cleaned to free it from adhering bits of coral, and also so that it may be soaked more thoroughly to remove the disagreeable bitter flavor. Sometimes mixed with inomona. Gonads of sea urchins are sometimes mixed with this limu.	limu lipaakai, limu lipehu, limu koko			<i>Asparagopsis sanfordiana</i> Harv.
kohu, limu		Video: 'AM	Ki'i 'ia i ka manawa kai malo'o ma hope o ka ua nui. Ho'okū i loko o ka wai a o ka pō, a laila e ho'oma'ema'e a kōpi i ka pa'akai.				
kohu, limu	MacCaughey 1917	152	It has a variety of Hawaiian names, limu kohu being the most common. On Maui, Molokai, and Kauai it is often called limu lipa-akai, or limu lipehu.	limu lipa-akai, limu lipehu			<i>Asparagopsis Sanfordiana</i> Harv.
kohu, limu	Henriques-Peabody	863					
kohu, limu	Neal						<i>Asparagopsis Sanfordiana</i> Harv.
kohu, limu	Ellis	Video: 'AM	Kaua'i's kohu is loloa (long) where it is 'oki'ia. O'ahu's kohu is pokopoko (short).				
kohu, limu	Pukui	207	A soft, succulent, small seaweed (<i>Asparagopsis taxiformis</i>), with densely branched furry tops that are tan, pink, or dark red, arising from a creeping stem-like portion; one of the best liked edible seaweeds, prepared in balls for market. Also limu koko and for some informants lipehe, lipehu, lipa'akai		Also limu koko and for some informants lipehe, lipehu, lipa'akai		<i>Asparagopsis taxiformis</i> (Delile) Trevisan
kohu, limu	Abbott 1996	24	Two types - kohu lipehe = light colored, kohu koko = dark red (Kaua'i distinction). Choice limu of ali'i	limu lipa'akai (Ni'ihau), lipehe and lipa'akai (Maui).			<i>Asparagopsis taxiformis</i> (Delile) Trevisan
kohu, limu	Abbott 1996	9, 13	Cleaned in salt water, then in fresh water and soaked overnight. Add salt. Mālama 'ia ma loko o ka pū'ele lā'ē. Two color forms, koko (blood-red) or lipehe (light-colored).				

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
kohu, limu	Lind	Interview	Method for planting limu kohu. Take back the roots (holdfasts) that sometimes come out when picking this limu, and stuff them into little holes in the reef where limu kohu normally grows.				
kohu, limu	Howard	Interview	She picks up this limu at a place called laupapa 'ohua (reef with manini fish babies).				<i>Asparagopsis taxiformis</i> (Delile) Trevisan
KOIALE	Doty	3	(Chamberlain)				
koiale	Setchell	103					
koiale, limu	Chamberlain	32					
KOKO	Doty	3					<i>Asparagopsis sanfordiana</i> Harv.; <i>Laurencia</i> spp?
koko	Setchell	103	Soft, young form of <i>Laurencia</i> according to some people.	limu kohu			
koko	Pukui	161	Same as limu kohu, a seaweed.	limu kohu		Same as 'akoko	<i>Asparagopsis taxiformis</i> (Delile) Trevisan
koko, limu	Pukui	207	Same as limu kohu. Lit. blood seaweed.	limu kohu			<i>Asparagopsis taxiformis</i> (Delile) Trevisan
koko, limu	Chamberlain	32					
koko, limu	Henriques-Peabody	863					
koko, limu	MacCaughy 1916	476	"the red limu"				<i>Asparagopsis Sanfordiana</i> Harv.
koko, limu	Reed	86		limu koko, limu lipakakai, limu lipahu			<i>Asparagopsis Sanfordiana</i> Harv.
KOLOA	Doty	3	(Chamberlain)				
koloa	Setchell	103					
koloa, limu	Chamberlain	32					
kūkai-o-Kamapua'a	Pukui	176	Same as Tipu'upu'u, a seaweed.	Tipu'upu'u			

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
KUKAEPUEO	Doty	3	ex Andrews Dictionary (Setchell).				
kukaepueo	Setchell	103				species of grass	
KULAPEPEIAO	Doty	4	Distorted <i>Gracilaria coronopifolia</i> (Setchell)				<i>Gracilaria coronopifolia</i> J. Agardh
kulapepeiao	Setchell	104	A distorted <i>Gracilaria coronopifolia</i> . Means carrying.				
KUMULIMUKALA	Doty	4	(Chamberlain)				
kumulimukala	Setchell	104					
kumulimukala, limu	Chamberlain	32					
KUMULIPOA	Doty	4	(Chamberlain)				
kumulipoa	Setchell	104					
kumulipoa, limu	Chamberlain	32					
KUWELU	Doty	4					<i>Gelidium</i> spp?
kuwelu	Henriques-Peabody	863					
kūwelu	Pukui	187	Same as limu lolou.	limu lolou		woody shrub with a long tail-like inflorescence resembling cockscomb, perhaps an amaranth	
kuwelu, limu	Reed	87		limu kekūwelu			<i>Gelidium</i> sp.?
la'au kamaka	Abbott 1996	33	Man's medicine (<i>Galaxaura</i>)				<i>Galaxaura</i>
lehelehe 'Ōio	Pukui	199	Same as lepe-o-Hina, seaweeds.	lepe-o-Hina			<i>Halymenia formosa</i> Harvey ex Kützting
lepe-o-Hina, limu-o-Hina	Ab Quin	Interview	Red and slimy. Eaten with lemon and sofu.				

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
LEPE-AHINA	Doty	4	Probably = LEPE-O-HINA				<i>Halymenia formosa</i> Harvey ex Kützting
lepe' ahina	Magruder	77					<i>Halymenia formosa</i> Harvey ex Kützting
lepeahina, limu	Reed	87	Very perishable, must be cleaned in salt water and eaten soon after preparation.				<i>Halymenia formosa</i> Harvey ex Kützting
lepelepe-o-Hina	Pukui	204	Same as lepe-o-Hina, a seaweed.	lepe-o-Hina		Monarch butterfly; Kanehameha butterfly; nudibranchia	<i>Halymenia formosa</i> Harvey ex Kützting
lepe-o-Hina	Pukui	204	A red seaweed (<i>Halymenia formosa</i>) with flat blades bearing fringed and irregular margins, with a variety of colors ranging from red to yellow; common allusion to swirling in water resembling movement of pā'ū in dancing. Also called lehelehe 'Ilio, lepelepe-o-Hina, limu-pepe-o-Hina, pā'ū-o-Hi' iaka.	lehelehe 'Ilio, lepelepe-o-Hina, limu-pepe-o-Hina, pā'ū-o-Hi' iaka	Also called lehelehe 'Ilio, lepelepe-o-Hina, limu-pepe-o-Hina, pā'ū-o-Hi' iaka	Same as lepelepe-o-Hina, a butterfly	<i>Halymenia formosa</i> Harvey ex Kützting
Lepe-o-Hina, limu	Abbott 1996	26	Eaten on same day.	limu lepe'ula'ula			<i>Halymenia formosa</i> Harvey ex Kützting
leponalo	Pukui	204	A kind of seaweed.				
leponalo	Henriques-Peabody	863					
likolehua	Pukui	205	A kind of seaweed.			sweet potato variety	
lmanamama	Pukui	207	A kind of seaweed. Lit., branching seaweed				
limoa	Pukui	207	Same as hulu moa, a seaweed.	hulu moa			
LIMU	Doty	4	Algae in Samoan and Hawaiian.				
limu	Andrews		Sea-moss or sea-grass; a general name of every kind of eatable herb that grows in the sea; the Hawaiians also class the limu among fish, the varieties are... (listed throughout database under Source: Andrews)				
limuaalaua	Andrews						
limuckaha	Andrews						
limu-clele-kai	Akama	60	Used as food. Mixed with other medicines, it becomes very effective for the removal of white blotches on the skin.				

LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
limulinanula	Andrews						
limutuhaito	Andrews						
limuluma	Andrews						
limu-huru	Akama	63	Used as food and cooked together with squid. Used for the cure of disorder in the alimentary canal.				
limulifosa	Andrews						
limukahakala	Andrews						
limukala	Andrews						
limu-kala-kai	Akama	59	Used as food. This, and the "lipoa" or fragrant sea weed, chewed together with baked taro by the mother and fed to the child forty days old, makes a good remedy for bodily weakness.				
limu-kalawai	Akama	59	This water weed, a good article of food, grows in fish-ponds almost anywhere around these islands. Used medicinally for the relief of the burning effect which frequently occurs about the chest.				
limukete	Andrews						
limu-kele	Akama	60	Black and tough water weed which grows in taro patches and in running streams. Used for menstruation.				
limukiki	Andrews						
limukoko	Andrews						
limulipahapala	Andrews						
limu-i-palahaha	Akama	61	Grows abundantly in rivets, deep green in color and quite puffed in appearance. It is used as food with waim, pork and beef stew and helpful for stomach ache if mixed with young taro leaves and baked.				
limulipalo	Andrews						
limulipatawai	Andrews						

LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
limu-lipala-wai	Alana	61	Used as food and for the removal of the congestion about the chest.				
limu-li-pelu	Alana	62	It is effective for the cure of white blotches on the skin or for rash.				
limu-li-puu-puu	Alana	61	It has seeds that are lumpy in appearance and it looks rough and a very good article of food. Its odor is somewhat fragrant. Used for bodily weakness, especially in children.				
limulipoa	Andrews						
limu-lipoa-tai	Alana	60	Used as food. Used for those afflicted with sores in the mouth, especially children. It is also used for children having weakness of the body.				
limulipupu	Andrews						
limulipuala	Andrews						
limulipupupu	Andrews						
limulolola, limu	Chamberlain	32					
limu-luuu	Alana	62	Grows in very deep water and is picked up off the shore after currents bring it in. It is helpful for trouble about the chest.				
limu-make-o-Hana	Pukui	207	<i>A codonotus (Polydora sp.) containing a toxin, reported as deadly poisonous at Hana, Maui. Also limu-make-o-Mu'olea.</i>		Also limu-make-o-Mu'olea		
limu-manatea	Alana	62	Used as food, usually cooked with sword leaf or with squid. As a remedy, it is largely employed for the cure of miscarriage.				
limunamue	Andrews						
limupai	Andrews						
limupakatea	Andrews						
limu-pahapaha-kui	Alana	62	Used as food. It is used for the relief of those affected with asthma, especially those having very severe cases.				
limu-pahapaha-wai	Alana	63	It is used for the relief of those afflicted with asthma, especially those having very severe cases.				

LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
limupalalaha	Andrews						
limupalawai	Andrews						
limu-pape-o-Hina	Pukui	207	Same as lipo-o-Hina, a seaweed.				<i>Hobsonia formosa</i> Harvey ex Kützting
limupipilani	Andrews						
LIMULOLOA	Doty	4	(Chamberlain)				
limuloloa	Andrews						
limuulala	Andrews						
lipakai	Seitchell	104	Means "salt limu."	limu koko, limu koku			
LIPA AKAI	Doty	4	(Seitchell)				
LIPA AKAI	Doty	4					<i>Asparagopsis Sanfordiana</i> Harv.
lipo akai	Pukui	208	Limu salted for indefinite storage without refrigeration; on Kure it usually limu koku from Ni'ihau. Some consider lipoche, lipoche, and lipo akai as variants of limu koku.				
li-pakai, limu	Alana	61	Used as food, frequently eaten with raw fish such as "oio" or "awaaua." The name applies when it is not detached from the rocks. When it is, it takes the name "limukochu." Used medicinally for healing a sprain, relieving stomach ache, pain about the wrist and knee and back ache.				
lipo-akai, limu	MacCauley 1917	152		limu koku, limu lipoche			<i>Asparagopsis Sanfordiana</i> Harv.
lipoakai, limu	Reed	86		limu koku, limu lipoche, limu koko			<i>Asparagopsis Sanfordiana</i> Harv.
lipaha	Seitchell	104					
lipaha	Pukui	208	Same as lipoakapaha, a seaweed.	lipoakapaha			<i>Ulva fasciata</i> Delle and <i>Monostroma asperum</i> (Kützting) Doty

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
lipahapaha	Henriques-Peabody	863					
lipahapaha	Pukui	208	A general term for sea lettuce <i>Ulva fasciata</i> and <i>Monostroma oxyspermum</i> , common green seaweeds with delicate broad blades, usually with wavy margins. Eaten as a minor element mixed with other tastier seaweeds. Also 'Iliohe'a, lipaha, lipaha, lipāhahala, pahapaha (probably restricted to Kauai'i), pakaia (restricted to Hawaii'i), and pālahalaha (Maui, Moloka'i, and O'ahu).		Also 'Iliohe'a, lipaha, lipaha, lipāhahala, pahapaha (probably restricted to Kauai'i), pakaia (restricted to Hawaii'i), and pālahalaha (Maui, Moloka'i, and O'ahu).		<i>Ulva fasciata</i> Delile and <i>Monostroma oxyspermum</i> (Kützting) Doty
lipahapaha, limu	Reed	88	Sometimes boiled with squid.				<i>Ulva lactuca rigida</i> (Agh.) Le Jolis
lipahapaha, limu	Chamberlain	32					
LIPAHAPALA	Doty	4					<i>Ulva lactuca</i>
lipahapala	Setchell	104					
lipahee	Setchell	105	Found on Maui.	pahee			
LIPAHE'E	Doty	4	(Maui); = PAHEE (Hawaii); (Hawaii) <i>Porphyra leucosticta</i> (Reed)				<i>Porphyra leucosticta</i> Thuret
lipahe'e	Pukui	208	Same as limu lū'au, a seaweed. Kauai'.	limu lū'au			
lipahe'e	Pukui	208	Same as pāhe'ehe'e, a seaweed. Called lipāhoe on Maui.	pāhe'ehe'e, lipāhoe (Maui)			
lipahee, limu	Reed	88	Reported only from two islands and scarce; called limu luau on Kauai and limu lipahu on Hawaii. Grow quite near the tide line along shore, but on exposed black lava rocks in rough water. Appears in winter or spring after heavy storms and last for only a few days. Washed in fresh water, salt added, put into clear water. Sometimes opihi is added and kept in jars for many weeks. Pounded to a pulp with salt and the juice is used to moisten bandages on cuts or bruises.	limu luau			<i>Porphyra leucosticta</i> Thuret
lipahe'ehe'e	Pukui	208	Same as lipahe'e.	lipahe'e			
lipāhe'ehe'e	Pukui	208	Same as lipahe'e.	lipahe'e			

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
līpāhōe	Pukui	208	Same as līpāh'e, a seaweed. Maui.	līpāh'e			
LIPAKAI	Doty	4	ex Chamberlain (= LIPAAKAI?)				
lipakai	Setchell	105	Possible contraction or misprint of lipakai.				
lipakai, limu	Chamberlain	32					
LIPALAHALAH	Doty	4	<i>Ulva fasciata</i> (Maui); <i>Ulva</i> spp. <i>Monostroma</i> spp. (Setchell); <i>Ulva lactuca</i> ; LIPALAHALOHA (Setchell)				<i>Ulva fasciata</i> Delile; <i>Ulva</i> spp., <i>Monostroma</i> spp.; <i>Ulva lactuca</i>
lipalahalaha	Setchell	105	Maui name for pakaiea.	pakaiea (Hawai'i)			<i>Ulva</i> spp., <i>Monostroma</i> spp.
līpālāhalaha	Pukui	208	Same as līpāhāpaha, sea lettuce.	līpāhāpaha			<i>Ulva fasciata</i> Delile and <i>Monostroma oxyspermum</i> (Kützinger) Doty
līpā-lāhā-lāhā, limu	MacCaughy 1917	138		limu paka-ea			<i>Ulva lactuca</i>
lipalahalaha, limu	Reed	88		limu pakaea			<i>Ulva lactuca lacinata</i> (Wulf.) J. Ag.
lipalao	Setchell	105					
LIPALA'Ō	Doty	4	(Chamberlain)				
līpala'ō	Pukui	208	Same as līpālāwai, fresh-water algae.	līpālāwai	Same as līpālāwai		
lipalao, limu	Chamberlain	32					
lipalawai	Henriques-Peabody	863					
lipalawai	Setchell	105	Found in fresh running water and brackish water where it is dark greenish brown.				
līpālāwai	Abbott 1996	13	Freshwater or brackish water algae also eaten by mauka dwellers.	limu pālāwai			
līpālāwai	Pukui	208	Edible, green, fresh-water algae, consisting of tufts of branching threads (<i>Pithophora</i> spp. and <i>Stigeoclonium</i> spp.), or of a network of threads (<i>Hydrodictyon</i>), or of simple threads (<i>Spirogyra</i> spp.). Also līpala'ō, nehe, pala'ō, pālāwai		Also līpala'ō, nehe, pala'ō, pālāwai		<i>Pithophora</i> spp. and <i>Stigeoclonium</i> spp. or <i>Hydrodictyon</i> or <i>Spirogyra</i> spp.

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
LI-PĀLĀ-WAI	Doty	4					<i>Stigeoclonium falklandicum</i> Kuetz.; <i>Pithophora affinis</i> Nordst.
li-pala-wai, limu	MacCaughy 1917	139		limu pala-wai			<i>Stigeoclonium Falklandicum</i> Kuetz.
li-pala-wai, limu	MacCaughy 1917	142		limu pala-wai			<i>Pithophora affinis</i> Nordst.
lipalawai, limu	Chamberlain	32					
lipalawai, limu	Reed	88		limu palawai			<i>Pithophora affinis?</i> Nordst., <i>Pithophora polymorpha</i> , <i>Stigeoclonium</i> sp.?
LIPALU	Doty	4					<i>Laurencia</i>
lipalu	Henriques-Peabody	863					
lipalu	Setchell	106	Young plants of a species of <i>Laurencia</i>				<i>Laurencia</i> sp.
lipalu	Pukui	208	A seaweed much like hulu 'Ilio 3 <i>Cladophora nitida</i>), and perhaps the same; edible, green, soft, slippery tufts.	hulu 'Ilio			<i>Cladophora nitida</i> Kuetz.
lipaosa	Pukui	208	A seaweed. Lit., fragrant seaweed.				
lipee	Reed	87		limu lippeepee			<i>Laurencia pinatifida</i> (Gmel.) Lam., <i>L. perforata</i> Mont., <i>L. obtusata</i> , <i>L. virgata</i> (Ag.) I. Ag.
LIPE'E	Doty	4	? contraction of LIPEEPEE (MacCaughy)				<i>Laurencia</i>
lipe'e	Pukui	208	Same as lipe'epe'e.	lipe'epe'e			
lipee, limu	Reed	87		limu manconeo, limu olipeepee			<i>Laurencia pinatifida</i> (Gmel.) Lam.
lipee, limu	MacCaughy 1917	153		limu li-pee-pee			<i>Laurencia</i> spp.
lipeepee	Setchell	106	"One day limu."				<i>Laurencia obtusa</i> var. <i>racemosa</i> , <i>Amansia glomerata</i> Ag.
lipeepee	Henriques-Peabody	863					

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
LIPE EPE'E	Doty	4	<i>Laurencia</i> (MacCaughy); <i>Amanzia glomerata</i> (Puna?, Hawaii); <i>Laurencia obtusa</i> var. <i>racemosa</i> (Setchell)				<i>Laurencia: Amanzia glomerata</i> Ag.; <i>Laurencia obtusa</i> var. <i>racemosa</i>
līpe'epe'e	Magruder	81					<i>Laurencia succisa</i> Cribb
līpe'epe'e	Ewaliko	Audio	'Āina Haina. Crunchy. 'Oī aku ka 'ono o ka līpe'epe'e ma mua o ka manaua.				
līpe'epe'e	Keohokalole	Video: AM	Season is Kekemapa, New Year. Kualoa has that kind of good limu.				
līpe'epe'e	Pukui	208	Some native species of a genus of edible seaweeds <i>Laurencia parvipapillata</i> , <i>L. dotyi</i> , <i>L. succisa</i> , short, with stiff, knobby branchlets, nestling especially in basaltic rock. Also 'līpe'epe'e, ho'onunu, līpe'e, pe'epe'e.		Also 'āpe'epe'e, ho'onunu, līpe'e, pe'epe'e.		<i>Laurencia parvipapillata</i> Tseng, <i>L. dotyi</i> Saito, <i>L. succisa</i> Cribb
līpe'epe'e	Kaunhipaula	Video: AM	Ma Nānākuli. Aia i lalo o ka 'aki'aki				
līpe'e'pe'e	Haanio	Audio	Loa'a ma Kona, 'a'ole nui.				
līpe'e'pe'e	Howard	Interview	She picks up this limu at a place called laupapa 'ōhua (reef with manini fish babies).				<i>Laurencia</i> spp.
li-pee-pee, limu	MacCaughy 1917	153	For the finer, longer forms.	limu līpee			<i>Laurencia</i> spp.
līpeepee, limu	Reed	87	Grow far out on the coral reefs or on exposed rocks in the surf. Very perishable, must be cleaned in salt water and eaten soon after preparation. Cooked with boiled meats long enough for the gelatin to be softened or dissolved. Sometimes used in inomona.	limu maneoneo			<i>Laurencia papillosa</i> (Forst.) Grev.
līpeepee, limu	Reed	87	Found drifted on sand or rocks. Grow far out on the coral reefs or on exposed rocks in the surf. Very perishable, must be cleaned in salt water and eaten soon after preparation. Cooked with boiled meats long enough for the gelatin to be softened or dissolved. Sometimes used in inomona.	līpee			<i>Laurencia pinatifida</i> (Gmel.) Lam., <i>L. perforata</i> Mont., <i>L. obtusata</i> , <i>L. virgata</i> (Ag.) J. Ag.
līpeepee, limu	Neal						<i>Laurencia</i> spp.
līpeepee, limu	Neal						<i>Laurencia</i> spp.
līpe'epe'e, limu	Abbott 1996	30	Some have transferred name to <i>Acanthophora spicifera</i> but some informants recognize this error.	līpe'e, līpeepe (Ni'ihau), limu āpe'epe'e (variety of līpe'epe'e).			<i>Laurencia succisa</i> Cribb; <i>L. dotyi</i> Saito
līpe'epe'e, limu	Abbott 1996	12	Kapu to hula dancers.				<i>Laurencia</i> spp.
līpehe	Pukui	208	Same as līpa'akai, salted limu.	līpa'akai			

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
LIPEHU	Doty	4					<i>Asparagopsis Sanfordiana</i> Harv.
lipehu	Setchell	106					
lipehu	Pukui	208	Same as lipē'akai, salted limu.	lipē'akai			
lipehu, limu	Reed	86		limu kōhu, limu lipā'akai, limu koko			<i>Asparagopsis Sanfordiana</i> Harv.
lipehu, limu	MacCaughy 1917	152		limu kōhu, limu lipa-akai			<i>Asparagopsis Sanfordiana</i> Harv.
lipehu, limu	Chamberlain	32					
lipēpē	Pukui	208	Same as lipē'ape'e. Ni'ihau	lipē'ape'e			
lipepeiao	Henriques-Peabody	863					
lipepeiao	Pukui	208	A seaweed. Also limu pepeiao and limu kulapepeiao			Also limu pepeiao and limu kulapepeiao a fresh-water moss, usually qualified by wai.	
LI-PEPE-IAO	Doty	4					<i>Amanzia glomerata</i> Ag.
li-pepe-iao, limu	MacCaughy 1917	154	Used for food.	limu pepe-iao			<i>Amanzia glomerata</i> Ag.
lipepeiao, limu	Reed	86	Different forms of the same name on Hawaii, not widely used, local.	limu pepeiao			<i>Amanzia glomerata</i> Ag.
LIPEWALE	Doty	4	(Chamberlain)				
lipewale	Setchell	106					
lipewale, limu	Chamberlain	32					
LIPOA	Doty	4	"not strong kind" <i>Dictyota divaricata</i> (Setchell); <i>Dictyota dichotoma</i> ; <i>Haliseris pardalis</i> (Reed); <i>Haliseris plagiogramma</i> ; <i>Dictyota acutiloba</i> var. <i>distorta</i> (Neal)				<i>Dictyota divaricata</i> Lamouroux; <i>Dictyota dichotoma</i> (Huds.) Lamour.; <i>Haliseris pardalis</i> ; <i>Haliseris plagiogramma</i> Mont.; <i>Dictyota acutiloba</i> var. <i>distorta</i> J. Ag.
lipou	Magruder	41					<i>Dicyspteria australis</i> (Sander) Askenasy; <i>D. plagiogramma</i> (Montagne) Vickers

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
lipoa	Miller						<i>Haliseris plagiogramma</i> Mont.
lipoa	Simpson						
lipoa	Setchell	92, 105	Most delicious fragrance. Word limu not applied to this name in speaking				<i>Haliseris plagiogramma</i> Mont., <i>Dictyota divaricata</i> Lamouroux, <i>D. dichotoma</i> (Huds.) Lamour., <i>D. patens</i>
lipoa	Henriques-Peabody	863					
lipoa	Bryan						<i>Haliseris</i>
lipoa	Kaina	Interview	There are different kinds of lipoa.				
lipoa	Wong	Interview	The kala and nenua eat the lipoa. On Ni'ihau, there is a lot of lipoa, but the Ni'ihau people consider it 'ōpala (rubbish). When it is the right season, the ocean is thick with lipoa and it washes up on the sand making a very strong smell.				
lipoa	Haario	Audio	Loa'a ma Kona, 'a'ole nui.				
lipoa	Ewaliko	Audio	Holo i nō 'oe, kaka 'oe a 'ōka'ōki. Ho'ōkomo i loko o ka 'ōmole. Maunūhā used to be (Hawaii'i Kai now). He manawa nō e pae mai. 'A'ole hana lei 'ia, he menū wale nō.				
lipoa	Ellis	Video: 'AM	Waikiki is onona i ka lipoa.				
lipoa	Ah Quin	Interview	Kau is February on Maui.				
lipoa	Pukui	208	Blade-like, branched, brown seaweeds <i>Dictyosperis plagiogramma</i> and <i>D. australis</i> with conspicuous midrib on blade, unique aroma and flavor; highly prized on all islands.				<i>Dictyosperis plagiogramma</i> (Montagne) Vickers and <i>D. australis</i> (Sonder) Askenasy
lipoa	Garmon	Interview	Her all time favorite limu is lipoa.				
lipoa, limu	Reed	87	Grow far out on the coral reefs or on exposed rocks in the surf. Iron rod is used to loosen sometimes. Dropped into hot soup or gravy as it is about to be served. Very often pounded and mixed with other seaweeds to give them its peculiar penetrating, spicy flavor and odor.				<i>Haliseris pardalis</i> , <i>Haliseris plagiogramma</i> Mont.
lipoa, limu	MacCanghey 1917	148	It is a favorite among the natives.				<i>Haliseris plagiogramma</i> Mont.
lipoa, limu	Chamberlain	32					

LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
lipoa, limu	Neal						<i>Haliotis plogiogramma</i> Mont., <i>Dicypota occidentalis</i> var. <i>diaria</i> J. Ag.
lipoa, limu	Albourn 1996	20	Said to be eaten by 'o to fish. Eaten with ali'u, he'e nalu, aka, or by itself with poi.	lipu' ali'u (heavily salted limu in general)			<i>Dicypopteria plogiogramma</i> (Montagu) Vickers <i>D. australis</i> (Sonder) Aikenasy
lipoa, limu	Albourn 1996	13	Cleaned in salt water, then in fresh water and pounded. Add salt.				
lipohipohai	Pukui	208	Same as polipohai 3, a seaweed.	polipohai			<i>Dicypopteria covemosa</i> (Forsthal) Borgesen
LIPUPU	Doty	4	(Chamberlain)				
lipupu	Seachell	107					
lipupu, limu	Chamberlain	32					
lipu' u	Pukui	208	Same as lipu' upu' u.	lipu' upu' u, kaka-o-Kamupua a			
LIPUULA	Doty	4	(Chamberlain)				
lipuula	Seachell	107					
lipuula, limu	Chamberlain	32					
lipupupu	Henriques-Petbody	863					
lipupupu	Seachell	107	Keeps only one day.				<i>Dicypopteria foxtalosa</i> (Ag.) Dana.
lipupupu, limu	Chamberlain	32					
lipupupu, limu	Neal						<i>Laurencia</i> sp.
lipupupu, limu	Reed	87		limu naneoneo			<i>Laurencia</i> sp.?
lipupupu, limu	Reed	88					<i>Yadonia utricularis</i> Ag.

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
LIPU'UPU'U	Doty	4					<i>Diccosphaeria favulosa</i> (Ag.) Dore.; <i>Laurencia</i> spp.; <i>Valonia utricularis</i> Ag.
lipu'upu'u	Keohokalole	Video: AM	Eaten with salt salmon.				
lipu'upu'u	Pukui	208	An edible green seaweed (<i>Valonia utricularis</i>), with rigid joints and short branches. Also kūkae-o-Kamapua'a.	kūkae-o-Kamapua'a, lipu'u	Also kūkae-o-Kamapua'a		
li-puu-puu, limu	MacCaughy 1917	142	Used by them (natives) for food.				<i>Valonia utricularis</i> Ag.
li-puu-puu, limu	MacCaughy 1917	153	A name used locally in certain districts on Hawai'i and Maui.				<i>Laurencia</i> spp.
LOLOA	Doty	5	(Maui, Kauai)				<i>Gelidium</i> ; <i>Pterocladia capillacea</i> (Gmelin) Santelices et Hommersand; <i>Gelidium pusillum</i> (Stackh.) Le Jol.; <i>Gelidium amansii</i>
Loloa	Abbott 1947	204					<i>Gelidium</i>
loloa	Pukui	211	A seaweed (KL line 95), probably the same as limu loloa.	limu loloa?			
loloa	Setchell	107					Possibly <i>Gelidium Amansii</i>
loloa	Bryan						<i>Gelidium</i>
lo-loa, limu	MacCaughy 1916	476	"the long or slender limu"				<i>Gelidium</i> sp.
loloa, limu	Reed	88	This species often called limu loloa on Maui and Kauai. Cooked with boiled meats long enough for the gelatin to be softened or dissolved.				<i>Pterocladia capillacea</i> (Gmelin) Santelices et Hommersand
loloa, limu	MacCaughy 1917	150	Extensively used as food.	limu ekaha-kaha			<i>Gelidium attenuatum</i> , <i>G. corneum</i> , <i>G. felicinum</i> (Bory), <i>G. intricatum</i> (J. Ag.) Kuetz., <i>G. latifolium</i> Born., <i>G. cartilagineum</i> (L.) Gaill., <i>G. pusillum</i> (Stackhouse) Le Jolis
loloa, limu	Reed	87	Grow quite near the tide line along shore, but on exposed black lava rocks in rough water. Cooked with boiled meats long enough for the gelatin to be softened or dissolved.				<i>Gelidium attenuatum</i> ?, <i>G. corneum</i> var.?, <i>G. latifolium</i> ? Born., <i>G. micropterum</i> ?, <i>G. pulvinatum</i> ?, <i>G. pusillum</i> ? (Stackhouse) Le Jolis
loloa, limu	Pukui	207	Several species of edible red seaweeds (<i>Gelidium</i>), cylindrical or flattened, more or less pinnately branched, texture firm and smooth.		'ānapanapa, 'ēkahakaha, kīwehu		<i>Gelidium</i>
loloa, limu	Neal						<i>Gelidium</i>

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
Ioloa, limu	Reed	87	Grow quite near the tide line along shore, but on exposed black lava rocks in rough water. Cooked with boiled meats long enough for the gelatin to be softened or dissolved.	limu ekahakaha			<i>Gelidium filicinum?</i> Bory
Ioloa, limu	MacCaughy 1917	150	Used by the natives of Kaua'i and Maui.				<i>Pterocladia capillacea</i> (Gmelin) Santelices et Hommersand
Iua'u	Bryan						<i>Porphyra</i>
LU'AU	Doty	5					<i>Porphyra leucosticta</i> Thuret (Kauai)
LU'AU	Doty	5	(Maui)				<i>Polypores?</i>
Ni'au	Pukui	214	Same as limu li'au, a seaweed.	limu li'au			
Iua'u, limu	Reed	88	Grow quite near the tide line along shore, but on exposed black lava rocks in rough water. Appears in winter or spring after heavy storms and last for only a few days. Washed in fresh water, salt added, put into clear water. Sometimes opihi is added and kept in jars for many weeks. Pounded to a pulp with salt and the juice is used to moisten bandages on cuts or bruises.	limu lipahee			<i>Porphyra leucosticta</i> Thuret
Iua'u, limu	Reed	88	A single small specimen sent by native on Maui, similar to <i>Porphyra</i> .				<i>Polypores?</i>
Iua'u, limu	MacCaughy 1917	148	A very highly prized delicacy.				<i>Porphyra leucosticta</i> Thuret
li'au, limu	Pukui	207	A red seaweed (<i>Porphyra</i> sp.), growing in the winter on boulders in exposed places, with delicate, thin blades appearing in groups. Best known on Kaua'i but known on all major islands. Also pahe'e or pahe'ehe'e.		Also pahe'e or pahe'ehe'e		<i>Porphyra</i> sp.
LUPE	Doty	5	(Chamberlain)				
lupe	Setchell	107				hikinamu or ray that was forbidden for women to eat also a fish.	
lupe, limu	Chamberlain	32					
maka	Pukui	224	A seaweed. See alani.		alani	varieties of sweet potato. See maka kila, maka koali, and maka nui	
MAKALOA	Doty	5	(Chamberlain)				
makaloe	Pukui	227	A seaweed.				

LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
makalo	Schell	108					
makalo, limu	Chamberlain	32					
MAKE	Doty	5	ALANI (ride Sechell), a/Dipota?				<i>Dichota?</i>
make	Sechell	108		linu alani			
make, limu	Henriques-Peabody	863					
make, limu	Kana	Interview	Out Muelas side.				
makua-o-ke-linu-kohu	Pikui	231	A seaweed. Lit., parent of the limu kohu.				
makua-o-ke-linu-kohu	Pikui	231	A seaweed. lit., parent of the limu kohu				
MANAUEA	Doty	5	ex Andrews Dictionary; = MANAUEA (Sechell)				
manaua	Sechell	108		manaua, manaua			
manaua	Pikui	236	Same as manaua, a seaweed.	manaua			
MANAUEA	Doty	5					<i>Gelidium filicinum</i> Bory; <i>Gracilaria coronopifolia</i> J. Agardh
Manaua	Abbott 1947	206	Found in sandy, sheltered areas about the islands				<i>Gracilaria</i>
manaua	Magruder	73					<i>Gracilaria coronopifolia</i> J. Agardh
manaua	Evaliko	Audio	Palapala mui ko kākou manaua ma mma o ka ogo. 'Oki' ōki e like me ka limu kohu. 'A, ohe maaka i ka mea pu'upū. 'Nag' 'oe i ka mea' 'akahi nō a puau (?) hua i puau. Kii i ka mea hā'ihā, maika'i'. 'Aina Haina.				
manaua	Kaahika	Audio	Palapāke ke hou. Palapāke mui i ka wai wela.				
manaua	Huanio	Audio	'Ai' 'ia, he mea ho'ohuihui.				

LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
manauwa	Henriques-Petbody	863					
manauwa	Sechell	108		manauwa, manauwa			<i>Gelidium filicinum</i> Bory
manauwa, manauwa	Pukui	237	A small red seaweed (<i>Gracilaria coronopifolia</i>), with stiff, cylindrical, succulent stems and branches, a good algae for making food gels (KL line 53). The term may be qualified with <i>pala</i> , <i>kea</i> , <i>pēla</i> , or <i>puaka</i> . Rarely manauwa, often called "short ogo" and "long ogo" (Japanese dialect) Ogo or long ogo is <i>Gracilaria lemaneiformis</i> .	manauwa		lano variety	<i>Gracilaria coronopifolia</i> J. Agardh
manauwa	Gannon	Interview	Recognized from picture in Magruder book.				
manauwa	Avaniza	Interview	Kahuku Point still has a lot of manauwa growing in the limestone depressions. If you're not going to eat it all, it can be preserved with some salt in a jar and refrigerated.				
ma-manauwa, limu	MacCaughey 1917	151	Extensively used for food by the Hawaiians.				<i>Gracilaria coronopifolia</i> J. Agardh
manauwa, limu	Neal						<i>Gracilaria coronopifolia</i> J. Agardh, <i>Gracilaria</i> spp.
manauwa, limu	Abbott 1996	13	Cleaned in salt water, then in fresh water and chopped. Ho 'ohai' in me la limu means one o i kekahi manauwa.				
manauwa, limu	Abbott 1996	29	Over-fished.				<i>Gracilaria coronopifolia</i> J. Agardh
manauwa, limu	Abbott 1996	12	Gelatinous on heating, used in stews or in imu.				
manauwa, limu	Pukui	208	See manauwa.		See manauwa		
manauwa, limu	Reed	87	Found drifted on sand or rocks. Grow near the shore. Occasionally cooked in imu when there was famine or war and lano and sweet potatoes were scarce. Cooked with boiled meat long enough for the gelatin to be softened or dissolved. Substituted for limu huna when cooked with squid or octopus. Boiled with chicken to thicken broth. Sometimes used in <i>monono</i> .				<i>Gracilaria coronopifolia</i> J. Agardh
manauwa	Sechell	95, 108	Eaten with fresh squid. "One day limu." Eaten cooked or raw.	manauwa, manauwa			<i>Gracilaria coronopifolia</i> J. Agardh
MANEONEO	Doy	5					<i>Laurencia obtusa</i> var. <i>racemosa</i>
maneoneo	Henriques-Petbody	863					

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
manconco	Setchell	108	Keeps only one day.				<i>Laurencia obtusa</i> var. <i>racemosa</i>
manc'one'o	Magruder	81					<i>Laurencia nidifica</i> J. Agardh
manc'one'o	Pukui	238	An edible seaweed, <i>Laurencia nidifica</i>				<i>Laurencia nidifica</i> J. Agardh
ma-neo-neo, limu	MacCaughey 1917	153	For the shorter, coarser species.				<i>Laurencia</i> spp.
manconco, limu	Reed	87	Found drifted on sand or rocks. Iron rod is used to loosen sometimes. Pounded with salt and the juice is put on cuts or bruises.	limu olipeepee, limu lipee			<i>Laurencia pumatifida</i> (Gmel.) Lam.
manconco, limu	Neal						<i>Laurencia</i> spp.
manconco, limu	Reed	87	The several species of <i>Laurencia</i> are generally called limu manconco, if coarse or short, and limu lipeepee if finer and longer. Limu lipee is an abbreviation, while limu lipuupua has only local use in places on Hawaii and Maui. Found drifted on sand or rocks. Iron rod is used to loosen sometimes. Pounded with salt and the juice is put on cuts or bruises.	limu lipeepee			<i>Laurencia papillosa</i> (Forst.) Grev.
manconco, limu	Chamberlain	32					
manconco, limu	Reed	87	Found drifted on sand or rocks. Iron rod is used to loosen sometimes. Pounded with salt and the juice is put on cuts or bruises.	limu lipuupua			<i>Laurencia</i> sp.?
manc'one'o, limu	Abbott 1996	32	Young plants are more tender and has a sharper peppery taste.				<i>Laurencia nidifica</i> J. Agardh
MANU	Doty	5					<i>Chaetomorpha antennina</i> (Bory) Kützing
manu	Bryan						<i>Cladophora</i>
manu, limu	Reed	86		limu huluilio, limu ilio			<i>Chaetomorpha antennina</i> (Bory) Kützing
manu, limu	MacCaughey 1917	141		limu hulu-ilio, limu ilio			<i>Cladophora antennina</i> (Bory) Kütz.
MAUAUWEA	Doty	5	(misprint of MANAUWEA?) ex Chamberlain (Setchell)				
mauauwea	Setchell	108	Probably a misprint for limu manauwea.				

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
mauauwea, limu	Chamberlain	32					
maunauwea	Simpson						
māwacwae	Pukui	243	A seaweed.				
māwacwae kilihune	Pukui	243	The name of a seaweed.				
me-nau-ea	Bryan		(lee Oahu, Kauai, Molokai)				<i>Gracilaria</i>
MENAUUEA	Doty	5	(Kona, Oahu, Kauai, and Molokai)				<i>Gracilaria</i>
mos, limu	Pukui	207	Same as hulu mos, a seaweed.	hulu mos			
MOOPUNA	Doty	5	KA-LIPOA; <i>Griffithsia ovalis</i> . Probably MO'OPUNA-A-KA-LIPOA.				<i>Griffithsia ovalis</i> Harv.?
mo'opuna	Pukui	254	Short for mo'opuna-a-ka-lipoa.	mo'opuna-a-ka-lipoa, aupūpū			<i>Griffithsia</i> sp.
moopuna, limu	MacCaughy 1917	154	A very scarce species; used for food on Maui and southern Hawai'i.	limu ka-lipoa, limu au-pupu			<i>Griffithsia ovalis</i> Harv.?
moopuna, limu	Reed	87		limu ka-lipoa, limu aupupu			<i>Griffithsia</i> sp.?
moopuna, limu	Neal						<i>Griffithsia</i>
moopuna a ka lipoa	Henriques-Peabody	863					
mo'opuna-a-ka-lipoa	Pukui	254	A fine red seaweed <i>Griffithsia</i> sp.), consisting of branching hairlike tufts; edible. Common in Ka'u and Kona, Hawai'i.	aupūpū, mo'opuna			<i>Griffithsia</i> sp.
moopuna-ka-lipoa, limu	Reed	66	Very perishable, must be cleaned in salt water and eaten soon after preparation. Sometimes are ripened by soaking in fresh water.				<i>Griffithsia</i> sp.?
mo'opuna-o-limu-kala	Abbott 1996	23	Clinging species of limu that is common on limu kala.				
MUALEA	Doty	5	rumored to be poisonous (Setchell).				

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
maalea	Seitchell	108	Poisonous limu, curly and greenish. Placed on hot stones to melt and can be dried when it becomes reddish and more potent. Placed in Awa it would kill the drinker in 15 minutes. Grows in two places near Hana. Dried and powdered, put in tube of pili grass and blown onto person to be poisoned. Handled at low tide when it is exposed, using sticks.				
mahaweie	Pukui	258	Same as hulu 'Ilio (<i>Chaetomorpha antennina</i>), a seaweed	hulu 'Ilio		A bivalve of the family Isonomidae. Also mahaweie. On O'ahu, the <i>Perna costellata</i> , <i>Atrina</i> sp.	<i>Chaetomorpha antennina</i> (Bory) Kützting
mahaweie	Henriques-Peabody	863					
naio	Pukui	259	Name of a seaweed.			bastard sandalwood (<i>Myoporum sandwicense</i>)	
nakeke	Pukui	259	A brown seaweed (<i>Hydroclathrus clathratus</i>), resembling pūhā and closely related to it, but the surface pierced with holes of different sizes; not eaten.				<i>Hydroclathrus clathratus</i> (C. Agardh) Howe
NANEA	Doty	5					<i>Hypnea nidifica</i> J. Agardh
nanca	Pukui	261	A seaweed (<i>Hypnea nidifica</i>)			Same as mohihihi, a vine (<i>Viola marina</i>)	<i>Hypnea nidifica</i> J. Agardh
nanca	Seitchell	109					<i>Hypnea nidifica</i> J. Agardh
nanoo	Seitchell	109					
NANO'O	Doty	5	(Chamberlain)				
nano'o	Pukui	262	A dark-red or purple seaweed, said to be same as nanca	nanca			<i>Hypnea nidifica</i> J. Agardh
nanoo, limu	Chamberlain	32					
NANUE	Doty	5	(Chamberlain)				
nanue	Pukui	262	An edible seaweed.			Var. of nanue, a fish.	
nanue	Seitchell	109					
nanue, limu	Chamberlain	32					

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
NANUI	Doty	5					<i>Grateloupia filicina</i> (Lamouroux) C. Agardh
nanui	Setchell	109	Grows in Kohala, edible, much like lipoa. Also found on Maui				
nanui	Kaina	Interview	Looks like lipoa. It is also eaten. It has a stronger smell than lipoa and you can smell it when driving on Hāmoa Road sometimes. It has seasons when it floats in and is eaten by the eneneue. When you cut the 'ōpū of the eneneue, you can rinse the insides and mix that limu (which is already chopped up for you) with the poke.				
nē	Pukui	263	A seaweed. (KL line 101.)				
NEHE	Doty	5					<i>Spirogyra</i> spp.
nehe	Pukui	264	Some kinds of pond scums (<i>Spirogyra</i> spp.), fine fresh-water algae, consisting of rows of single-celled filaments, each cell containing ribbon-shaped spirals. Also limu kala wai, lipala'ō, lipālāwai, pala'ō, pālāwai.		Also limu kala wai, lipala'ō, lipālāwai, pala'ō, pālāwai.		<i>Spirogyra</i> spp.
nehe, limu	Reed	88		limu palawai, limu polao			<i>Spirogyra</i> sp. (probably several)
nehe, limu	Pukui	207	Same as limu kalawai.	limu kalawai			
NEI	Doty	5					<i>Gymnogongrus vermicularis americana</i> J. Ag.; <i>Gymnogongrus disciplinalis</i> (Bory) J. Ag.
nei	Pukui	264	Same as kō'e'e'ele, a seaweed; according to Reed 116, same as limu uua loli.	limu uua loli?	kō'e'e'ele		
nei	Kaina	Interview	'Opihi limu, oldtimers eat with 'opuhi (packed when dark). Smooth and crunchy.				<i>Ahnfeltiopsis flabelliformis</i> (Harvey) Masuda
nei, limu	Reed	87		limu uua loli, limu ekahaekaha, limu koetele or koete, limu awikiwiki			<i>Gymnogongrus vermicularis americana</i> J. Ag.; <i>Gymnogongrus disciplinalis</i> (Bory) J. Ag.
nei, limu	MacCaughy 1917	150		limu ua-ua-loli, limu ekaha-kaha, limu ko-ele-ele, limu awiki-wiki			
NOHOMAHE	Doty	5					<i>Chaetomorpha antennina</i> (Bory) Kützting
nohomahe	Setchell	109					<i>Chaetomorpha antennina</i> (Bory) Kützting
nu'a	Henriques-Peabody	863					

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
nu'a	Pukui	272	A kind of seaweed.				
OAOAKA	Doty	5	(Chamberlain)				
oaoaka	Setchell	109					
oaoaka, limu	Chamberlain	32					
ogo, limu	Ili	Video: 'AM	'Ohi i ka limu. Before, limu ogo was rubbish.				
ogo, limu	Keohokalole	Video: 'AM	Nui ma Kaula.				
ohiohio	Setchell	110					
'OHI 'OHI 'O	Doty	5	(Chamberlain)				
'ōhi'ōhi'ō	Pukui	278	A seaweed.				
ohiohio, limu	Chamberlain	32					
ohune	Henriques- Peabody	863					
'ōbune	Pukui	279	A kind of seaweed.				
okala	Setchell	110					<i>Galaxaura rugosa</i> (Ellis et Solander) Lamouroux
'OKALA	Doty	5					<i>Galaxaura rugosa</i> (Ellis et Solander) Lamouroux
'ōkala	Pukui	281	A rather small red seaweed (<i>Galaxaura rugosa</i>), regularly and densely branching the branches hollow and marked with rings; not edible. Also pākalakala (<i>Galaxaura</i> spp.)	kauno'a, kauna'oa	Also pākalakala (<i>Galaxaura</i> spp.)	same as 'ōkole, sea anemone perhaps	<i>Galaxaura rugosa</i> (Ellis et Solander) Lamouroux
OKUPE	Doty	5	(Chamberlain)				
okupe	Setchell	110					

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
okupo, limu	Chamberlain	32					
OLIPPEEPEE	Doty	5					<i>Laurencia phnatiifida</i> (Gmel.) Lam.
olipeepee, limu	Reed	87		limu mameoneo, limu lipee			<i>Laurencia phnatiifida</i> (Gmel.) Lam.
OOCHIEA	Doty	5	(Chamberlain)				
oohica	Setchell	110					
oohica, limu	Chamberlain	32					
oolu	Henriques-Peabody	863					
oolu	Setchell	110	Favorite about Honolulu.				<i>Laurencia obtusa</i> var. <i>racemosa</i> , <i>Hypnea nidifica</i> ? J. Agardh
'O'OLU	Doty	5					<i>Champia compressa</i> Harv.; <i>Chondria tenuissima</i> var. <i>intermedia</i> Grun.; <i>Laurencia obtusa</i> var. <i>racemosa</i>
'o'olu	Pukui	290	Two edible, fragile, red seaweeds (<i>Champia</i> sp. and <i>Chondria tenuissima</i>). They melt in fresh water, hence must be cleaned in sea water.			laro variety	<i>Champia</i> sp. and <i>Chondria tenuissima</i>
o-olu, limu	MacCaughy 1917	152					<i>Champia compressa</i> Harv.
o-olu, limu	MacCaughy 1916	478					<i>Chondria tenuissima</i>
o-olu, limu	MacCaughy 1917	153	Used for food.				<i>Chondria tenuissima</i>
oolu, limu	Reed	86	Grow near the shore. Very perishable, must be cleaned in salt water and eaten soon after preparation.				<i>Champia compressa</i> Harv.; <i>Chondria tenuissima intermedia</i>
oolu, limu	Neal						<i>Champia compressa</i> Harv.
OPAI	Doty	6	(Chamberlain) Probably = 'OPAE.				
opai	Setchell	110					

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
opai, limu	Chamberlain	32					
'opihi limu	Eweliko	Audio	Hiki nō ke 'ai.				
opihi limu	Ah Quin	Interview	1) Green with clusters. 2) Long red.				
'opihi, limu	Kaalakea	Audio	Pupupu koma 'ano. Kuku 'o lalo.				
'opihi, limu	Ellis	Video: 'AM	'A'ole mau popo ka inoa maoli.				
ouri	Gaudichaud	148					<i>Sphaerococcus concinnus</i> (Brown ex Turner) C. Agardh
'owakawaka	Keohokalole	Video: 'AM	Type of limu.				
owakawaka	Ah Quin	Interview	Dark brown, lettuce like, brittle.				
PA'AKAI	Doty	6	HALE (Chamberlain); LIPAAKAI? ex Chamberlain. (fide Setchell)				
paakai	Setchell	110		lipaakai			
paakai, limu	Chamberlain	32					
pa'akai, limu	Pukui	207	Limu salted for indefinite storage without refrigeration. On Maui, usually limu lipos. See lipa'akai.		See lipa'akai		
PAKAIEA	Doty	6	(Chamberlain); PAKAIEA or <i>Ulva</i> ? (Setchell)				<i>Ulva</i> ?
pakaiea	Setchell	110		pakaiea			
pakaiea, limu	Chamberlain	32					
PACAYA	Doty	6					<i>Ulva linza</i> ; <i>Ulva compressa</i> ; <i>Solenia compressa</i>
pacaya	Gaudichaud	148					<i>Ulva linza</i> (<i>Ulva compressa</i>). (<i>Solenia compressa</i>)

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
PAHAPAHA	Doty	6					<i>Monostroma latissimum</i> Wittrock; <i>Ulva fasciata</i> Delile
pahapaha	Pukui	299	Same as Ipahapaha, sea lettuce.	Ipahapaha			<i>Ulva fasciata</i> Delile and <i>Monostroma oxyspermum</i> (Kützting) Doty
pahapaha	Setchell	110	Kaua'i name for pakaia (Hawai'i).				<i>Ulva fasciata</i> Delile, <i>Monostroma latissimum</i> Wittrock
pahapaha	Ewaliko	Audio	Pae mai nō 'o ia, uhiuli. 'Ai ka po'e kepani, 'oki'oki me ka soih a he aha li.				
paha-paha, liuu	MacCaughy 1917	138		limu pa-laha-loha			<i>Ulva fasciata</i> Delile
pahapaha, limu	Bryan						<i>Ulva</i>
pahapaha, limu	Reed	88	The three <i>Ulva</i> spp. seem to be indistinguishable by the natives, and the different islands and localities have various forms of the name, but limu pakaia is only in use on Hawaii. Grow near the shore. Dropped into hot soup or gravy as it is about to be served. Sometimes are ripened by soaking in fresh water. Tender tips are rubbed between fingers and small molluscs of a special kind is added with salt. Pounded and put on bruises.	limu palahaloha			<i>Ulva fasciata</i> Delile
pahapaha, limu	Neal						<i>Ulva</i> spp.
pahapaha, limu	Chamberlain	32					
PAHAPAHA-O-POLI	Doty	6	Hale (ex Chamberlain fide Setchell). Probably = PAHAPA-O-POLIHAI and named for a place on Kauai where it occurs.				
pahapaha o poli hale	Setchell	111					
pahapaha o Polihale	Abbott 1996	12	<i>Ulva fasciata</i> used as an adornment in hula, after the locality where it was used in western Kaua'i.				<i>Ulva fasciata</i> Delile
pahapaha-o-Polihale	Pukui	299	A kind of pahapaha said to be found only at Poli-hale, Kaua'i; after drying it was believed to revive when immersed in sea water; it was made into leis (FS 103.)				<i>Ulva</i> sp.
pahapaha o polihale, limu	Chamberlain	32					
pahapaha wai	Pukui	299	A sea lettuce (<i>Ulva</i> sp.) with narrow frond. Found where sea and fresh water meet.				<i>Ulva</i> sp.
pahee	Henriques-Peabody	863					

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
pahee	Setchell	111	Hawai'i name for lipahee. Eaten raw and put on cooked meat.	lipahee			
PAHE'E	Doty	6	(Hawaii) same as LIPAHEE (Setchell).				
pahe'e	Magruder	89					<i>Porphyra sp.</i>
pahe'e	Haamio	Audio	Ulu ma ka lae o Pāhe'ehe'e ka inoa. Ho'okahi ulu 'ana o ka makahiki.				
pahe'e	Pukui	299	Same as pāhe'ehe'e, a seaweed.	pāhe'ehe'e			<i>Porphyra sp.</i>
pahe'e	Garmon	Interview	Recognized from picture in Magruder book.				
pahe'e, limu	Abbott 1996	23	Used with i'a lomi (raw fish?).	pāhe'ehe'e, lū'au (Kaua'i)			<i>Porphyra spp.</i>
pāhe'ehe'e	Pukui	299	A green cushion shaped solid seaweed <i>Porphyra sp.</i> , formerly <i>Dictyosphaeria</i> . Also lipahe'e, lipahe'ehe'e, lipāhoe, pahe'e.		Also lipahe'e, lipahe'ehe'e, lipāhoe, pahe'e		<i>Porphyra sp.</i>
PAKA-EA	Doty	6					<i>Ulva locusta lacinata</i> (Wulf) J. Ag.
paka-ea	Bryan						<i>Ulva</i>
paka-ea, limu	MacCaughy 1917	138		limu lipa-laha-laha			<i>Ulva locusta</i>
pakaea, limu	Reed	88		limu tipalahalaha			<i>Ulva locusta lacinata</i> (Wulf) J. Ag.
PAKAELEAWA	Doty	6	(Maui)—HULUHULUWAENA				<i>Grateloupia filicina</i> (Lamouroux) C. Agardh
pakaeleawa	Setchell	111	Maui name for huluhuluwaena (Hawai'i).	pakaeleawa			
PAKA-ELE-AWA'A	Doty	6	Kauai, all but Hawaii (MacCaughy)				<i>Grateloupia filicina</i> (Lamouroux) C. Agardh
paka-ele-awa'a, limu	MacCaughy 1917	154	This name is used exclusively on Kaua'i. Both names are used on intermediate islands.	limu huluhuluwaena			<i>Grateloupia filicina</i> (Lamouroux) C. Agardh
pakaeleawa, limu	Reed	87	Grow near the shore.	limu huluhuluwaena			<i>Grateloupia filicina</i> (Lamouroux) C. Agardh

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
PAKAIEA	Doty	6					<i>Ulva</i> spp. and <i>Monostroma</i> in general; <i>Ulva fasciata</i> Delile
pakaiea	Henriques-Peabody	863					
pakaiea	Setchell	111	Some say it is edible, others disagree.				<i>Ulva fasciata</i> Delile, <i>Monostroma</i> sp.
pakaiea	Pukui	304	Same as Iipahupaha, sea lettuce. Hawai'i			Same as halili'i, a variety of sugar cane; named for the seaweed; a variety of taro.	
pakaiea, limu	Abbott 1996	12	Relative of sea lettuce, early ancestor of shark 'aumakua was wrapped in pakaiea after birth and put into sea. Remnants of this garment is thought to be seen in the green sides of certain sharks. Shorter, broader, has irregular margins, lighter green in color than <i>U. fasciata</i> .				
pākakakala	Pukui	304	A coarse, non-edible seaweed (<i>Galaxaura</i> spp.). Cf. kauno'a, 'ōkala, pākolekole, piliko'a	pākolekole	Cf. kauno'a, 'ōkala, pākolekole, piliko'a		<i>Galaxaura</i> spp.
PAKELEAWEA	Doty	6	(ex Chamberlain) PAKELEAWAA? (Setchell).				
pakele-o-wa'a	Pukui	305	An edible seaweed. Also huluhulu waena.	huluhulu waena			
PAKELEAWAA	Doty	6	(Maui)				<i>Grateloupia filicina</i> (Lamouroux) C. Agardh
Pakeleawaa	Abbott 1947	206	(Maui)				<i>Grateloupia</i>
pakeleawaa	Setchell	111		pakeleawa			
pakeleawa'a	Sanborn	Audio	Limu planting. They did it. "Chop-chop" is taken on small stones. Don't uproot. Doesn't grow in rough water, likes sand. Grows at low tide, long. More 'ono at some places because of the spring water. If a woman is pe'a, 'a'ole hele i ka hana, haumia 'A'ole kumo i ke kai.				
pakeleawaa, limu	Chamberlain	32					
pakūpakū	Pukui	305	A seaweed. Also pakūpakū	pakūpakū	pakūpakū		
pākua	Ewaliko	Audio	Paho'e loa. Ulu i luna o ka pōhaku a me ke one. Pahupahu, kōhu kilika.				

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
pākolekole	Pukui	306	Same as pākakakala, a seaweed.	pākakakala			<i>Galaxaura</i> spp.
pakūpakū	Pukui	306	A seaweed. Also pakēpakē	pakēpakē	pakēpakē		
PALAHALAHA	Doty	6	PAKAIEA?				<i>Monostroma?</i> ; <i>Ulva fasciata</i> Delile or <i>Laurencia</i>
palahalaha	Bryan						<i>Ulva</i>
palahalaha	Setchell	111					<i>Ulva</i> sp., <i>Monostroma</i> sp., <i>Laurencia perforata</i> Mont.?
palahalaha	Magruder	33					<i>Ulva fasciata</i> Delile
pālahalaha	Pukui	307	Same as līpahapaha, a seaweed.	līpahapaha			<i>Ulva fasciata</i> Delile and <i>Monostroma oxyspermum</i> (Kützinger) Doty
pālahalaha	Garmon	Interview	Put into soup after you turn the fire off (recognized from picture in Magruder book).				
pālahalaha	Howard	Interview	She doesn't eat this limu but she knows some people eat it with shoyu (Japanese style).				
palahalaha, limu	Chamberlain	32					
pālahalaha, limu	Abbott 1996	17	Mix with huluhuluwaena.	pahapaha (young taro leaves), pakuaea			<i>Ulva fasciata</i> Delile
pālahalaha, limu	Pukui	207	Same as pālahalaha 2	pālahalaha			
PALA-HALOHA	Doty	6					<i>Ulva fasciata</i> Delile
pa-laha-loha, limu	MacCaughy 1917	138		limu paha-paha			<i>Ulva fasciata</i> Delile
palahaloha, limu	Reed	88		limu pahapaha			<i>Ulva fasciata</i> Delile
pala'ō	Pukui	309	Same as līpālāwai, fresh-water algae	līpālāwai	Same as līpālāwai.		
FALAPAHAKOU	Doty	6					<i>Centroceras clavulatum</i> (C. Agardh) Montagne

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
palapahakou	Setchell	112					<i>Centroceras clavulatum</i> (C. Agardh) Montagne
palapohaku	Henriques-Peabody	863					
pala'ula	Pukui	310	A seaweed.				
palawai	Setchell	112	Looks like limu eleele but is not as coarse	limu lipalawai, limu palawai			
pālāwai	Pukui	311	Same as limu kala wai, pond-scums.	limu kalawai			
PALA-WAI	Doty	6	LI-PALA-WAI				<i>Stigeoclonium Falklandicum</i> Kuetz.; <i>Spirogyra</i> ; <i>Hydrodictyon reticulatum</i> (L.) Lagerh. and other green fresh water species; <i>Pithophora affinis</i> Nordst.
pala-wai	MacCaughy 1917	138	Sometimes used by them (natives) for food. The name is also applied to a number of other green fresh-water algae.				<i>Hydrodictyon reticulatum</i> (L.) Lagerh.
pala-wai, limu	MacCaughy 1917	139	Used by them (natives) for food.	limu li-pala-wai			<i>Stigeoclonium Falklandicum</i> Kuetz.
pala-wai, limu	MacCaughy 1917	143	A number of them are used by the natives for food.				<i>Spirogyra</i> spp.
pala-wai, limu	MacCaughy 1917	142		limu li-pala-wai			<i>Pithophora affinis</i> Nordst.
palawai, limu	Reed	88	Most all the edible green fresh-water algae are called lipalawai or polawaie, and there are perhaps a half dozen species in the mountain streams that are known by these names. Pounded with limu eleele and salt and tied on cuts and bruises.	limu lipalawai			<i>Pithophora affinis</i> ? Nordst. <i>Pithophora polymorpha</i> . <i>Stigeoclonium</i> sp.?
palawai, limu	Chamberlain	32					
palawai, limu	Reed	87	Pounded with limu eleele and salt and tied on cuts and bruises.				<i>Hydrodictyon reticulatum</i> (L.) Lagerh.
palawai, limu	Reed	88	Pounded with limu eleele and salt and tied on cuts and bruises.	limu nehe, limu polao			<i>Spirogyra</i> sp. (probably several)
pālāwai, limu	Abbott 1996	13	Freshwater or brackish water algae also eaten by mauka dwellers.	lipālāwai			
PALEWAWAE	Doty	6					<i>Laurencia</i> spp.
palewawae	Setchell	112	Young <i>Laurencia</i>				<i>Laurencia</i> sp.?

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
palewāwae	Pukui	312	Small, fan-shaped brown seaweeds (two species of <i>Padina</i> [<i>P. commersonii</i> , light-brown, and <i>P. vickersiae</i> , larger, darker-brown]), common on the reef, each fan more or less split and curled. Not eaten.			joy weed (<i>Alternanthera amoena</i>) from Brazil	<i>Padina commersonii</i> Bory, <i>P. vickersiae</i>
PAPAAKEA	Doty	6					<i>Liagora valida</i> Harvey
papaakea	Setchell	112					<i>Liagora valida</i> Harvey
pāpa'akea	Pukui	316	A seaweed (<i>Liagora valida</i>), related to puaiki.				<i>Liagora valida</i> Harvey
pā'ū-o-Hi'iaka	Pukui	321	A kind of red seaweed with wide, thin thallus. Perhaps same as limu hā'ula.	limu hā'ula?		Jacquemontia sandwicensis; a variety of taro, good gray poi; a variety of sweet potato	
pā'ū-o-Hi'iaka	Pukui	321	Same as lepe-o-Hina, a seaweed.	lepe-o-Hina		Jacquemontia sandwicensis; a variety of taro, good gray poi; a variety of sweet potato	<i>Halymenia formosa</i> Harvey ex Kützting
peepee	Setchell	112	Maui name for aalaala. Lasts only one day.	aalaala			
PE'EPE'E	Doty	6	(Maui) AALAULA (Hawaii)				<i>Codium Muellieri</i> Kuetzing
pe'epe'e	Pukui	322	Same as lipe'epe'e, a seaweed. Maui.	lipe'epe'e			
pe'epe'e, limu	Kaina	Interview	Grows in cracks, plenty down Maka'ala. Old kind has coral sometimes, so you shouldn't pick that one.				
PEHU	Doty	6	(Chamberlain)				
pehu	Pukui	323	A kind of seaweed.			A variety of sweet potato	
pehu	Setchell	112					
pehu, limu	Chamberlain	32					
pehu, limu	Kaina	Interview	Looks just like kahu, except it flattens when taken out of the water. Doesn't have a strong smell like kahu and it tastes hot. He knows of one guy that puts it in his stew to give it a hot flavor.				
PEPE-AHINA	Doty	6					<i>Halymenia formosa</i> Harvey ex Kützting
pepe-ahina, limu	MacCaughy 1917	154	Rare.				<i>Halymenia formosa</i> Harvey ex Kützting

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
PEPE-JAO	Doty	6					<i>Amansia glomerata</i> Ag.; <i>Padina pavonia</i> (L.) Gaill.
pepeiao	Setchell	112		pilipiliko'a			<i>Padina pavonia</i> (L.) Gaill.
pepe-iao, limu	MacCaughey (1917)	154		limu li-pepe-iao			<i>Amansia glomerata</i> Ag.
pepeiao, limu	Reed	86		limu lipepeiao			<i>Amansia glomerata</i> Ag.
pepeiao, limu	Chamberlain	32					
pepeiao, limu	Pukui	207	Same as lipepeiao.	lipepeiao			
PEPEULU	Doty	6	(Chamberlain)				
pepeulu	Setchell	113					
pepeulu, limu	Chamberlain	32					
pīlali	Pukui	329	A seaweed.				
piliko'a	Setchell	113					<i>Galaxaura lapidescens</i> (Soland) Lamx.
piliko'a	Pukui	330	A stiff kind of pākakala, a seaweed (<i>Galaxaura lapidescens</i>)			Hawkfish, variety of kō	<i>Galaxaura lapidescens</i> (Soland) Lamx.
PILILO'A	Doty	6					<i>Galaxaura lapidescens</i> (Soland) Lamx.
PILIPILIKO'A	Doty	6					<i>Padina pavonia</i> (L.) Gaill.
pilipiliko'a	Setchell	113		pepeiao			<i>Padina pavonia</i> (L.) Gaill.
PĪPĪLANA	Doty	7					<i>Enteromorpha</i>
PĪPĪLANI	Doty	7	(Chamberlain)				

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
pipilani	Setchell	113					
pipilani	Pukui	332	Some kinds of green seaweeds (species of <i>Enteromorpha</i>). Maui. Also 'ele'ele.	'ele'ele	Also 'ele'ele.		<i>Enteromorpha</i>
pipilani, limu	Reed	86, 87	On Maui it is sometimes called limu pipilani	limu clecle			<i>Enteromorpha flexuosa</i> (Wulfen) J. Agardh <i>E. hoptikii</i> Ag., <i>E. intestinalis</i> (Linnaeus) Link <i>E. linza</i> (Linnaeus) J. Agardh <i>E. plumosa</i> (Muller) J. Agardh <i>E. prolifera</i> var. <i>tubulosa</i> Kuetz., <i>E. prolifera</i> (Muller) J. Agardh
pipilani, limu	Charobertain	32					
POHĀ	Doty	7					<i>Hydroclathrus cancellatus</i> Bory
poha	Magruder	47					<i>Hydroclathrus clathratus</i> (C. Agardh) Howe
poha	Setchell	113	Eaten raw by natives.				<i>Hydroclathrus cancellatus</i> Bory
pohā	Pukui	334	Same as pohāpohā.	pohāpohā, lipohāpohā		cape gooseberry = pa'ina (Hawai'i)	<i>Dictyosphaeria cavernosa</i> (Forsskal) Borgesen
pohāpohā	Pukui	335	A non-edible, green seaweed (<i>Dictyosphaeria cavernosa</i>), small, round, hollow, that bursts with a pop when stepped on. Also lipohāpohā, pohā.	lipohāpohā, pohā	Also lipohāpohā, pohā.	"running pop" <i>Passiflora foetida</i>	<i>Dictyosphaeria cavernosa</i> (Forsskal) Borgesen
POLAO	Doty	7					<i>Spirogyra</i> spp.
polao, limu	Reed	88		limu palawai, limu nehe			<i>Spirogyra</i> sp. (probably several)
PUAKI	Doty	7					<i>Liagora decussata</i> Mont.
puaki	Pukui	346	A red seaweed (<i>Liagora decussata</i>), somewhat calcified but flexible, branched; not edible; related to pāpa'ākea				<i>Liagora decussata</i> Mont.
pu-aki, limu	MacCaughy 1917	149	Considered edible.				<i>Liagora decussata</i> Mont.
puaki, limu	Reed	87	Grow near the shore.				<i>Liagora decussata</i> Mont.
PUALU	Doty	7					<i>Polyisiphantia mollis</i> Hooker et Harvey ex Harvey 1847

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
pu-ala, limu	MacCaughy 1917	154	It is not popular, and it is used by but few natives for food.	limu hawane			<i>Polyaiphonia mollis</i> Hooker et Harvey ex Harvey 1847
puala, limu	Reed	88	Used by but few Hawaiians for food; not popular	limu hawane			<i>Polyaiphonia mollis</i> Hooker et Harvey ex Harvey 1847
PŪHĀ	Doty	7					<i>Colpomenia sinuosa</i> (Roth) Derbes et Solier
puha	Setchell	113					<i>Colpomenia sinuosa</i> (Roth) Derbes et Solier
puha	Magruder	39					<i>Colpomenia sinuosa</i> (Roth) Derbes et Solier
puha	Garmon	Interview	Seasonal limu that likes water flow (recognized from picture in Magruder book).				
pūhā	Pukui	348	A brown seaweed (<i>Colpomenia sinuosa</i>), cushion-shaped, hollow, surface smooth and un-even; not eaten. Cf. nakeke.		Cf. nakeke		<i>Colpomenia sinuosa</i> (Roth) Derbes et Solier
pūbuhuhulu	Pukui	350	Same as hulu 'Ōio (<i>Centroceras clavatum</i> & <i>Ectocarpus</i> spp.), seaweeds.	hulu 'Ōio			<i>Centroceras clavatum</i> & <i>Ectocarpus</i> spp.
pupukaneilio	Setchell	113					
pupukaneilio, limu	Chamberlain	32					
PUPUKANELIO	Doty	7	(Chamberlain)				
RIMOU	Doty	7	<i>Les algues marines et fluviatiles</i> (Gaudichaud).				
Rimou	Gaudichaud	148	<i>les algues marines et fluviatiles</i>				
RIMOU-KALA	Doty	7					<i>Sargassum cuneifolium</i> et <i>aquilifolium</i>
rimou-kala	Gaudichaud	148					<i>Sargassum cuneifolium</i> et <i>aquilifolium</i>
RIMU	Doty	7	Tahitian, Tuamotu, and Maori name for algae and similar substances.				
turtle limu	Kaina	Interview	Green limu that grows down Hāna Bay.				

LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
nurtle limu	Diego	Interview	Red with leaves, skinny on bottom and branching on top, smooth. Also called erenue limu				
uua loli	Pukui	362	See limu uua loli.		limu uua loli.		
UAU/ALOLI	Doty	7					<i>Gymnogongrus vermicularis americana</i> J. Ag.; <i>Gymnogongrus disciplinatus</i> (Doty) J. Ag.
uuaaboli	Setchell	113					
uae-up-foi, limu	MacCaughy 1917	150		limu ekaka-kaha, limu ko-ete-ete, limu awiki-wiki, limu nei			<i>Gymnogongrus vermicularis, G. americana, G. disciplinatus</i> J. Ag.
uua loli, limu	Pukui	207	Same as 'ekakakaha, a seaweed.	'ekakakaha, limu uua loli			
uuaaboli, limu	Reed	87	This limu is usually called limu uuaaboli, but the other names are used in certain localities. Grow far out on the coral reefs or on exposed rocks in the surf. Grow quite near the tide line along shore, but on exposed black lava rocks in rough water. limu rod is used to loosen sometimes. Occasionally cooked in limu when there was famine or war and taro and sweet potatoes were scarce. Cooked with boiled mussels long enough for the gelatin to be softened or dissolved. Finely pounded, it is sometimes mixed with salt and small limpets. Gonads of sea urchins are sometimes mixed with this limu.	limu ekaka-kaha, limu kochele or koele, limu awiki-wiki, limu nei			<i>Gymnogongrus vermicularis americana</i> J. Ag.; <i>Gymnogongrus disciplinatus</i> (Doty) J. Ag.
uuaaboli, limu	Chamberlain	32					
ula, limu	Kapahulohua	Interview	Red, looks like lipoa.				
ULAULA	Doty	7	(Chamberlain)				
ulaula	Setchell	113					
ulaula, limu	Chamberlain	32					
uude	Henriques-Peabody	863					
upi	Henriques-Peabody	863					

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
WAWAEIOLE	Doty	7					<i>Codium Muellieri</i> Kuetzing (Hawaii)
wawaeiole	Seitchell	113		aaiaula			<i>Codium Muellieri</i> Kuetzing
wāwae'iole	Magruder	25					<i>Codium edule</i> Silva
wāwae'iole	Pukui	382	Other analysts call wāwae'iole, <i>Codium edule</i> , and list 'a'ala-'ula and 'ala'ula as variant names. Some equate huluhulu-a-'iole and hulu'iole with wāwae'iole		Also huluhulu-a-'iole and hulu'iole		<i>Codium edule</i> Silva
wāwae'iole	Ewaliko	Audio	Aia nō i waho. 'A'ole makemake i ka mea pae mai. Kī'i i ka mea, aia nō ma laila. 'A'ole maika i ka mea nunui loa, ka mea makali i mai nō. 'O ka mea makali i ma ka mea helu 'ekahi. Pipili i ka 'ako'ako'a. "Hana 'oe me ka ma'ema'e, 'ai nō 'oe me ka ma'ema'e, 'a'ole kāpuhu." Lawe i kīlani kai a ho'okomo ka wāwae'iole, mau nō ke kō'i'i, 'a'ole palupalu. Palupalu i ka wai maoli. Inā 'a'ole kai, pa'akai, kōpi'a nāko.	'a'ala'ula			
wāwae'iole	Kaina	Interview	Hāna mostly has the kind that lies flat on the rocks, not the one that branches upright from the sand and sways.				
wāwae'iole	Garmon	Interview	Recognized from picture in Magruder book.				
wawae-iole, limu	MacCaughy 1917	142	This species is called limu a-ala-ula and also on Hawaii i, limu wawae-iole and wawae-moa	limu a-ala-ula, limu wawae-moa			<i>Codium Muellieri</i> Kuetzing
wawae-iole, limu	MacCaughy 1916	476	"the mouse-foot limu"				<i>Codium Muellieri</i> Kuetzing
wawaeiole, limu	Reed	86		limu aallauka, limu wawaimoa			<i>Codium Muellieri</i> Kuetzing
wawaeiole, limu	Simpson						
wawae'iole, limu	Keobokalote	Video: 'AM	Has at Hau'ula.				
wāwae'iole, limu	Abbott 1996	13, 18	Cleaned in salt water, then in fresh water and pounded. Add salt. Ho'ohui 'ia me ka lipe'epe'e i kekahi manawa.	Ala'ula, 'a'ala'ula (Maui) & 'a'ala (Kaua'i) for prepared limu, hulu'iole (obsolete), wāwae-moa (obsolete)			<i>Codium edule</i> Silva
WAWAE-MOA	Doty	7					(Hawaii) <i>Codium Muellieri</i> Kuetzing
wawae-moa, limu	MacCaughy 1917	142		limu wawae-iole limu a-ala-ula			<i>Codium Muellieri</i> Kuetzing
WA-WAHI-WA'A	Doty	7					<i>Chnoospora fastigata pacifica</i> J. Ag.

LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
wawahivaa	Satchell	113					
wawahivaa	Henriques- Penbody	863					
wāwahivā'a	Pukui	382	Same as kaupau, a seaweed.	kaupau		Borer that bores into canoe hulls, a teredo.	<i>Chemospora pacifica</i> J. Agardh
wa-vahi-wā'a, limu	MacCaughy 1917	148	Used by them (natives) for food.	limu kaw-pau			<i>Chemospora fastigata pacifica</i> J. Agardh
wawahivaa, limu	Reed	86		limu kaupau			<i>Chemospora fastigata pacifica</i> J. Ag.
wawahivaa, limu	Chamberlain	32					
wawahivaa, limu	Reed	86		limu alliaula, limu wawaciale			<i>Codium Muelleri</i> Kuetzing

Appendix B: List of Limu Names

1.aaki	hulu ii	kuwelu***
aalaula*	hulu manu***	laau kanaka***
aalii	hulu moa***	lehelehe ilio***
ai-a-ka-honu***	hulu puaa***	lepe-o-Hina*
akaakoa***	hulu ilio***	lepelepe-o-Hina
akala***	hulu wawae-iole	lepeahina*
akiaki*	huna***	leponalo
akiula	hune	likolehua
akoakoa	hunehune***	limanamana***
akuila***	hupekohola	limoa***
alaalaula***	huwae	lipaakai*
alani*	ihau	lipaha***
alaula	ii	lipahapaha
alolo***	iliau**	lipahapala
anapanapa***	ilio	lipahee*
apeepee***	iliohaa***	lipaheehee
aupupu***	kahakala	lipahoe***
awaawa	kahili**	lipakai
awikiwiki***	ka-kanaka*	lipalahalaha*
ehau	kala*	lipalao***
ekaha***	kalalauliilii*	lipalawai***
ekahakaha	kalalaunuinui*	lipalu***
eleau**	kalawai***	lipaoaoa***
eleele*	kalipoa	lipee*
eleele-kai	kanaloa***	lipeepee*
eleele maoli*	kaunaoa***	lipehe*
eloelo	kaunoa	lipehu
elula	kaupau***	lipepe***
hana***	kekuwelu	lipepeiao
haua***	kele	lipewale
haulelani***	kihe***	lipoa*
hawane***	kikala	lipohapoha***
hinakea***	kiki	lipupu
hinaula***	kimau	lipuu***
holowai***	kipa-akai	lipuula
holomoku	koele**	lipuupuu
hona	koeleele	loloa*
honu***	kohu*	luau*
hoonunu***	koiale	lupe
huahuakai***	koko*	maka***
huai***	koloa	makaloa
hulu***	kukae-o-Kamapuaa***	make*
huluhulu***	kukaepueo	make-o-Hana*
huluhuluwaena*	kulapepeiao***	makua-o-ka-limu-kohu***
huluhulu wahine	kumulimukala	manaiea
huluhulu-a-iole***	kumulipoa	manauea*

* Limu names that have been associated with actual limu through previous studies.

** Limu names that have been associated with actual limu through this study.

*** Limu names that have information but the association with actual limu has not been documented.

Appendix B: List of Limu Names

maneoneo*	pakalakala***
manu	pakeleawaa
mauauwea	pakepake***
mawaewae	pakoa***
mawaewae kilihune	pakolekole***
menauea	pakupaku***
moa	palahalaha*
moopuna***	palahaloha
moopuna-a-ka-lipoa***	palapahakou
moopuna-o-limu-kala***	palapohaku
mualea*	palao
nahawelee***	palaula
naio	palawai
nakeke***	palewawae***
nanea***	papaakea***
nanoo***	pau-o-Hiika***
nanue***	peepee*
nanui	pehu**
ne	pepe-ahina
nehe***	pepeiao
nei**	pepe-o-Hina
nohomahe	pepeulu
nua	pilali
oaoaka***	pilikoa***
ohiohio	pilipilikoa
ohune	pipilana
okala***	pipilani***
okupe	poha***
olipeepee	pohapoha
oohiea	polao
oolu*	puaki***
opai	pualu***
opihi***	puha***
ouri	puhuluhulu***
owakawaka	pupukaneilio
paakai*	rimou-kala
paakaiea	uaualoli***
pacaya	ula***
pahapaha	ulaula
pahapaha-o-Polihale***	unele
pahapaha wai***	upi
pahee*	wawaeiole*
paheehee	wawaemoa
paka-ea	wawaimoa
pakaeleawaa*	229.wawahiwaa***
pakaiea*	

* Limu names that have been associated with actual limu through previous studies.

** Limu names that have been associated with actual limu through this study.

*** Limu names that have information but the association with actual limu has not been documented.

Appendix C: Personal Information Sheet

Personal Information from the people who talked to me about limu.

Full Name: _____

Date of Birth: _____

Place of Birth: _____

Address: _____

Phone Number: _____

Where you were brought up: _____

Occupation/what you do (fish, farm, etc.): _____

Who taught you about limu? _____

Where this person (these people) is/ are from? _____

If you had to put an origin on where your knowledge about limu is from, where would that be? (South Kona, Kihei, Hana, etc.)

Appendix D: List of Voucher Specimens

LIMU NAME	SOURCE	VOUCHER NUMBER	LATIN NAMES
limu kohu	Kaina	KA002LIMU	<i>Asparagopsis taxiformis</i> (Delile) Trevisan
nei	Kaina	KA028LIMU	<i>Ahnfeltiopsis flabelliformis</i> (Harvey) Masuda
iliau	Kaina	KA034LIMU	<i>Ahnfeltiopsis concinna</i> (J. Agardh) Silva et DeCew
limu manauca	Anamizu	KA059LIMU	<i>Gracilaria coronopifolia</i> J. Agardh
wāwae`iole	Kaina	KA060LIMU	<i>Codium arabicum</i> Kützinger
limu kohu	Howard	KA061LIMU	<i>Asparagopsis taxiformis</i> (Delile) Trevisan
limu `ele`ele	Howard	KA062LIMU	<i>Enteromorpha prolifera</i> (Muller) J. Agardh
limu pālahalaha	Howard	KA063LIMU	<i>Ulva fasciata</i> Delile
kō`ele`ele, kō`ele	Howard	KA064LIMU	<i>Ahnfeltiopsis flabelliformis</i> (Harvey) Masuda
limu huluhuluwaena	Howard	KA065LIMU	<i>Grateloupia filicina</i> (Lamoroux) C. Agardh
limu kala	Howard	KA066LIMU	<i>Sargassum echinocarpum</i> J. Agardh
limu `aki`aki	Howard	KA067LIMU	<i>Ahnfeltiopsis concinna</i> (J. Agardh) Silva et DeCew
līpe`epe`e	Howard	KA068LIMU	<i>Laurencia</i> sp.

Appendix E: Supplemental Information - Audio Recording References

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IKE KUUNA LIMU: LEARNING ABOUT HAWAII'S LIMU

A REPORT SUBMITTED TO THE GRADUATE DIVISION OF THE
UNIVERSITY OF HAWAII IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF SCIENCE

IN

BOTANICAL SCIENCES (BOTANY)

NOVEMBER 2003

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NO KUU LEI PAKALANA NANA I KAKOO
A PAIPAI NUI MAI IAU MA KEIA PAHANA NUI.

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ABSTRACT

Limu, especially the edible marine algae, play an important part in Hawaiian culture. Limu has nutritional, spiritual, and social value for Hawaiians. Over 200 different Hawaiian names of limu have been documented. Positive scientific identification for most of these names, however, is lacking. By meeting and talking with a variety of limu-knowledgeable peoples, a great deal of information was recorded. Positive identifications as well as uses for some of these limu have been documented and recorded as a resource for future generations. The limu database, constructed as a part of this research, contains information from published sources, audio and video recordings, and personal interviews conducted for this thesis. This database should be considered a launching point for future research and not a completed work. It is expected that the work will continue as new generations learn more and more.

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PREFACE

Choosing to write a paper about limu was never something that I dreamt about. How I got to this point in my life is cumulative and not very easy to explain.

I learned from a young age, admiring my grandparents, parents, and older brother that hard, outdoor work is very rewarding. Something about working on the land just felt right, like coming home. I took up Hawaiian language in high school and continued in college at U.H. Hilo even though I was aiming for a business degree. Hawaiian came easy to me and it, too, somehow fit. While being bored to death by my economics classes, a required core class captured my attention. Botany 153 taught by Dr. Don Hemmes focused an instinctual love for nature to an excitement about plants. I had already realized that business was not my bag and I would eventually go on to graduate with degrees in Hawaiian Studies and Natural Sciences with a minor in Biology.

I entered graduate school at U.H. Mānoa only because my wife was going to pursue her masters on O`ahu. Botany

was the obvious choice because of my passion for Hawaiian plants and my knack for botany as a science. The class that set me in the direction of learning about limu was a phycology class taught by Dr. Celia Smith. Though an excellent class about Hawaiian algae, it was what was lacking from that class and the general field of phycology that challenged me towards studying limu. I was learning about hundreds of species of Hawaiian algae, only a few dozen of which I could confidently call by a Hawaiian name (thanks entirely to the ethnophycological studies conducted by Dr. Isabella Aiona Abbott). However, I began to take notice, especially from Pukui's Hawaiian Dictionary, of an abundance of Hawaiian limu names with little to no description and no recorded positive identification. There was my task.

I eventually migrated to the sixth floor of the St. John Plant Science Building to be closer to the local students who congregated in some lab space up there. Of course, Dr. Abbott was also located on the sixth floor and in fact, is the main reason why these students were up

there in the first place. She, being a Hawaiian, had converted these students to psychology, and so I had just moved into "Limu Grand Central." Everything was in place, and it was only a matter of time before I, too, found myself floating in the world of ethnopsychology.

Throughout the years, whether it be planting sweet potato on the farm as a young boy, to conversing in Hawaiian as a high school teen, to participating in retreats in Waipi'o Valley as a young adult in college, there were defining times that fueled the eternal fire inside of me to design my future by pursuing the past, my heritage. It's kind of like those stories of taking troubled Hawaiian teens and putting them in a Hawaiian environment, traditional sailing or in the taro patch, and watching them flourish and excel. Whether it's spiritual, guidance from the unseen, or it's just a knack we have, Hawaiians are drawn to their heritage. Why am I writing a paper about limu? I say it's because I'm Hawaiian.

There is a dark side to this story as well. It has to do with an internal struggle and is part of the reason why

it's year 2003 and I'm still doing something I started in 1998. It has to do with the clash that sometimes occurs between scientific methods and Hawaiian culture, between indigenous property rights and the power that comes with the culturally inconsistent use of this knowledge, and the incompatibility between some parts of western and traditional cultures. Above all of these issues, however, was my own personal culture and my fear of writing something that was wrong, or incomplete, or arrived at in a culturally inappropriate way, or just culturally unacceptable altogether. There were and are still times when I feel like I shouldn't have embarked on this process and that I shouldn't submit this paper as a thesis for fear of what the repercussions might be. I don't know what the value of this work will be for others, but I do know that it was the process from which I learned the most. Having said all of this, I hope the reader has gained a little insight into my feelings about this paper and that it will be taken, like most things should be, with a grain of salt.

CHAPTER 1: INTRODUCTION

Goals

There are a few main goals for this research. The first is to review the literature and compile a comprehensive database of Hawaiian *limu* names from various sources. This database will provide a foundation of knowledge to which I will add new names and information. This database can prove a valuable resource for people interested in Hawaiian *limu* names and uses.

The second goal of this research is to meet with and learn from people who have knowledge of Hawaiian *limu* names and uses. Documenting this information will add information to the existing base and shed new light on contradictory records. With sound ethnobotanical methods, *limu* names and the sources of these names can be linked to *limu* specimens.¹

To understand, appreciate, and perpetuate culture it is essential to learn from living people, not just from

¹ The value of this research lies in the permanent documentation of "new" *limu* information, such as names, identification, and uses that have never been documented before. From one generation to the next there is a loss of information. Documenting this information before it is "taken to the grave" is a desperate mission that is being undertaken in many cultural disciplines.

historical records. By learning about *limu* from these people, I will be able to perpetuate my culture by identifying, gathering, and preparing *limu* for my own family.

Hypotheses

1) There are still people remaining who can recognize and identify many Hawaiian *limu*.

2) Categories of *limu* knowledge that still exist include (not exclusively):

- a. Hawaiian names of *limu*
- b. Uses of *limu* (edible, medicinal, ceremonial, none, etc.)
- c. Collection and preparation methods
- d. Conservation practices
- e. Distributions (past and present)
- f. Myths, folklore, interesting anecdotes, etc.

3) People from different areas will have a varying range of *limu* knowledge consistent with their home area.

4) There are people who have in the past and who currently still cultivate *limu*.

CHAPTER 2: *LIMU* STUDIES IN HAWAI`I

What is *limu*?

"**limu.** 1. A general name for all kinds of plants living under water, both fresh and salt, also algae growing in any damp place in the air, as on the ground, on rocks, and on other plants; also mosses, liverworts, lichens. See saying, *hailepo. Ua ulu ka limu*, the seaweed (pubic hairs) are growing. (PPN *limu*.) 2. vs. Tricky, deceiving, unstable (said to be named for the octopus' ability to change its color, and its waving of a tentacle to and fro like the motion of a seaweed in water). 3. n. Wind gust. *Rare*. 4. n. Coil, curl. *Rare*. 5. n. Soft coral" (Pukui & Elbert 1986).

The term *limu* is considered the general name for aquatic to semi-aquatic life forms with a similar shape or form. For distinct *limu* with utilitarian properties, another specific name is applied in order to better distinguish between the vast amount of life forms that fall under the heading of "*limu*." This second name is usually a descriptive adjective (i.e., *limu wāwae`iole* or "rats foot" *limu*) or sometimes a suffix to the contracted form of *limu* which is "*li-*" (i.e., *lipepeiao*, *limu pepeiao*, or "ear" *limu*) (Pukui & Elbert 1986, Reed 1907). This system, for

the most part, is not different from the modern scientific system of binomial nomenclature which uses a generic name and a specific epithet (Doty 1957). As expected, this is not an uncommon system for cultures to classify and name their plants (Berlin 1992). When explaining to children this common and natural process of naming plants, I like to compare it to giving our children two names, a last name that perpetuates the relationship to the family and a unique name that sets the child apart. Except for the occasional "junior" this is usually a well-received analogy.

Studies of Hawaiian *limu* names

In comparison to the numerous scientific studies done on Hawaiian marine algae (see Abbott 1999), there are relatively few that have concentrated on the Hawaiian names and/or ethnobotanical uses for these *limu*. These studies are reviewed below in chronological order of publication.

Charles Gaudichaud (1826) was the first to publish information on Hawaiian algae. During his visit to the

islands he recorded the words *rimou* (*limu*), *pacaya*, *ouri*, and *rimou-kala* with Latin names for the last three.²

Interestingly, his spelling of the words reflects an older version of the Hawaiian language that he encountered (where a "Hawaiian 'r'" is used in the place of a more contemporary 'l').

Lorrin Andrews' dictionary (1974) which was first published in 1865 provides a list of Hawaiian *limu* names under the term *limu*. This list is made up of 26 names without any descriptions.³ Included within the definition of *limu* is the interesting statement that Hawaiians "class the *limu* among fish."⁴

² Listed in Appendix A under SOURCE: Gaudichaud

³ Listed in Appendix A under SOURCE: Andrews

⁴ Definition of *limu* can be found in the Appendix under the heading *LIMU* NAME: *limu* and SOURCE: Andrews. This statement is corroborated by the following riddle: "*Ku`u wahi i`a `a`ole ona na`au, a he keu na`e kona ola, a `ono ke `ai `ia, a makemake nui `ia e nā ali`i a me nā maka`āinana. Ka limu.*" "My little fish without entrails, but alive, is very good to eat, and is greatly desired by chiefs and common people. The seaweed." (Judd 1930). The phrase "*`ai me ka i`a*" is the Hawaiian analogy of the English phrase "meat and potatoes." *`Ai* which refers to *poi* or *kalo* (*Colocasia esculenta*) and *i`a* which literally means fish but refers to just about anything that is eaten with the *poi* or *kalo*. Using this general theme, many food products may also be classified with *i`a*.

J. E. Chamberlain published a paper in 1881 which gave a list of 64 Hawaiian names.⁵ This list was taken from Andrews' dictionary and "other sources" which are not named. These names, as the ones provided by Andrews, do not include descriptions or Latin names.

Josephine Tilden (1905) published a paper about her adventures collecting algae in Hawai'i. Within this paper she mentions two Hawaiian names, aalaula and kala along with Latin names for both.⁶

Dr. William Setchell of the University of California published a paper entitled "*Limu*" in 1905. This account is based on his visits to several areas in the islands and informal interviews with several Hawaiian informants. He compiled an annotated list of 106 Hawaiian *limu* names.⁷ Included within this list of *limu* are some descriptive information, meanings of names, notes on usage, and the sources who provided him the information. This publication

⁵ Listed in Appendix A under SOURCE: Chamberlain.

⁶ Listed in Appendix A under SOURCE: Tilden.

⁷ Listed in Appendix A under SOURCE: Setchell.

includes Latin names for certain *limu*, though no voucher specimens are cited.

Minnie Reed, a teacher at the Kamehameha Schools, published her three year study of *limu* in 1907. She mainly collected her information through friends, students, and informal interviews with people at markets and beaches. Through these acquaintances she was able to accumulate specimens of many different types of edible *limu* with their Hawaiian names. Scientific determinations of the specimens were made by herself and by Dr. Setchell. In all, she identified a total of 70 species of algae under the category of edible *limu*.⁸ She recognized that "not more than forty are in general use" and "the other thirty or thirty-five are used only by a few people in certain small areas where they are found in limited quantities." These numbers are probably conservative given Reed's statement that "almost every kind of seaweed that could possibly be eaten was used for food by some Hawaiians." (Reed 1907) Abbott

⁸ Although referred here as 70 distinct species, subsequent taxonomic work has renamed and reclassified many of these taxa. These 70 names are listed in Appendix A under SOURCE: Reed.

(1992) agrees that Hawaiians, out of all Pacific islanders, ate the most diverse range of *limu* species.

Dr. Vaughan MacCaughey of the College of Hawai'i compiled two annotated lists of Hawaiian algae in 1918. While these lists of Hawaiian genera did not specifically aim to record ethnobotanical data, Hawaiian names and some information were provided for 33 economically valued *limu*.⁹ He recognized this exclusion of ethnobotanical data and did not intend for his list to be complete in any regard.

D. M. Kaaiakamanu and J. K. Akina were two employees of the Board of Health who compiled information on the Hawaiian medicinal values of plants. First published in 1922, this collection includes 20 *limu* entries, 10 of which are seaweeds, and the remaining 10 are either freshwater algae, mosses, liverworts, or lichens.¹⁰

Marie Neal (1930) produced a study on Hawaiian marine algae that did not focus on Hawaiian names or

⁹ Listed in Appendix A under SOURCE: MacCaughey.

¹⁰ Listed in Appendix A under SOURCE: Kaaiakamanu.

ethnobotanical uses. However, she did report 20 Hawaiian names with corresponding Latin names.¹¹

In 1940, Dr. E. S. Handy published the first volume of *The Hawaiian Planter*. This book, though it focused on Hawaiian terrestrial horticulture and ethnobotany, did include a ceremonial use and a riddle for *limu* kala.¹²

Dr. Isabella Abbott published a study on brackish-water algae in 1947. Within this study, she reports the Hawaiian names of five *limu* along with the Latin generic names.¹³

Harvey Miller produced a document that remains unpublished but can be found at the Bernice Pauahi Bishop Museum (1951). His study is basically a literature review that compiles Hawaiian *limu* names and corresponding Latin names when available. This compilation drew from 12 published resources and has been a great help to me in my efforts of continuing this type of research.

¹¹ Listed in Appendix A under SOURCE: Neal.

¹² This ceremonial use and riddle is included in Appendix A under SOURCE: Handy.

¹³ Listed in Appendix A under SOURCE: Abbott 1947.

Not long after Miller, Dr. Maxwell Doty put out his own compilation of Hawaiian *limu* names with Latin counterparts (1957).¹⁴ He stated that many of the scientific names cited had changed, even at that time. His compilation drew from nine published resources, all of which are included in Miller's study.

In 1974, Dr. Isabella Abbott published an ethnobotanical study of *limu* (revised in 1996). Abbott reviewed the lists prepared by Reed and Doty, and found that perhaps 63 are indeed algae and thought to be edible. Of these 63, she narrowed the number of edible *limu* which can be determined consistently by the Hawaiian and Latin name to 29. Her study concentrated on 14 of the most common edible *limu* during that time.¹⁵ Abbott (1996) reported different categories of *limu* that are based on the experiences of her mother's and those of other informants. The categories are distinguished as follows: 1) *limu* with a common name that are known and can be identified, 2) *limu* without a common name that are edible (the name is lost

¹⁴ Listed in Appendix A under SOURCE: Doty.

¹⁵ Listed in Appendix A under SOURCE: Abbott.

perhaps), and 3) *limu* without a common name and not edible, or *`ōpala* (rubbish).

From the Henriques-Peabody (date unknown) collection housed at the Bernice Pauahi Bishop Museum, comes an unpublished document titled "Names of Hawaiian birds, shore fauna, and seaweeds." This list contains 44 Hawaiian *limu* names with no other information.

Lastly, a somewhat enigmatic resource exists as an old cardboard box that contains over a hundred 8X5 index cards, on which are hand-recorded Hawaiian *limu* names, sources of information, and some other information. They do not reference any Latin names. These cards are the compilation of Dr. Elizabeth Woust Brown a former professor at the College of Education, University of Hawai`i at Mānoa. They now rest on the corner of Dr. Abbott's desk at the University of Hawai`i at Mānoa.

Gathering *limu*¹⁶

It is generally recognized that in Hawai'i, older women are the knowledgeable bunch when it comes to *limu* matters (Chamberlain 1881, Setchell 1905). This is true because *limu* gathering is generally done by women who wade out into the water when the tide is low (Reed 1907, Setchell 1905).

Limu gathering is done in various ways depending on the type of *limu* and where and how it grows.¹⁷ *Limu* gathering was generally done by women and children, except when extra help was needed to reach the *limu* in rougher, deep waters (Reed 1907). They could often be found wading out on the reef flats in the low tide, gathering the desired *limu* (Abbott 1992, Reed 1907). While gathering *limu*, bits of undesirable *limu* were separated and discarded along with any adhering bits of grit or sand (Reed 1907). The remaining desired *limu* were put into sacks, pails, or

¹⁶ Information presented here reflects the observations and experiences of those who published papers. It is also important to remember that information reflects slices of time in which they worked and not necessarily the pre-contact era.

¹⁷ Abbott (1996) provides brief descriptions of collecting methods for 14 commonly eaten species of *limu*.

any other kind of suitable receptacle (Reed 1907). Some *limu* detaches from the substrate¹⁸ and is easily collected when floating in the water or cast ashore in the drift (Abbott 1996, MacCaughey 1916, Reed 1907).

In the instance where a boat was needed, a group of women and men would go out and the women would collect while the men would fish.

Certain *limu* that remain attached to the substrate require a more active form of gathering, which brings up an interesting question. That is, which is (are) the proper method(s) of collecting attached *limu*? Reed (1907) reports that sharpened iron scraps or old knives were used to "scrape the seaweed from the coral or rocks." This would be especially true for *limu uaualoli*, *limu kohu*, *limu aalaula*,

¹⁸ In my experiences, certain localities tend to have a specific set of *limu* that are stirred up by the oceans actions and are washed ashore in the drift. While it is obvious that this phenomenon is dependent on the types of *limu* that grow in each locality, there are other factors that are involved. For example, at two different beaches that both have *limu kohu*, I have seen it in the drift at one of the beaches but never in the drift at the other. I believe that local currents, wave action, and underwater topography are a few reasons why drift content can vary so much between localities that have the same *limu*. This makes it hard to group *limu* into general categories of drift-collected *limu* and attached *limu*. In order for this to be done properly, it must be done on a location by location basis.

limu lipoa, *limu luau*, *limu akiaki*, and *limu lipeepee*, whose holdfasts are especially strong (Reed 1907).¹⁹ Abbott's (1996) report concurs that *limu lū'au* (*Porphyra vietnamensis* Tanaka et Pham, Reed - *limu luau*) does require scraping from the rock substrate, but differs when it comes to the collection of *limu kohu* (*Asparagopsis taxiformis* (Delile) Trevisan). Abbott reported that "'seed' is left by Hawaiians by never taking the creeping portions." In an interview conducted by Mary Kawena Pukui with a few women (Winifred Sanborn, Alice Aki, and others) about the *limu pakeleawa'a* (*Grateloupia filicina* (Lamouroux) C. Agardh), they emphatically stated that one should not uproot *limu* during gathering as it is considered "*hana'ino*" or careless mistreatment (Pukui 1960). It is unclear if this attitude was reflecting the specific collections of *limu pakeleawa'a* or general *limu* gathering practice.

From the same interview, it was also brought forth that during her menstrual period, it was forbidden for the

¹⁹ The spelling of these *limu* are as found in Reed's treatise. Scientific names were not included due to the numerous taxonomic changes that have since occurred. Appendix A provides taxonomic and additional information extracted from each source.

woman to enter the ocean, thus restricting her from gathering *limu* ("pe`a ka wahine... haumia... `a`ole komo i ke kai").

Preparing *limu*

As expected, preparation varies greatly from one *limu* to the next. Adding to this variation are the preferences of people from different areas. Despite this variation, the literature reports a fairly uniform method for cleaning and preparing *limu*.

After the collection of *limu*, thoroughly washing off the sand, grit and bits of coral becomes the priority. The first washing is usually done at the beach in salt water (Abbott 1992). Having watched Hawaiians clean *limu*, I feel the need to comment on the meticulous nature in which this process is executed. Not a tiny grain of sand or the smallest fragment of undesirable *limu* escapes segregation.

Reed (1907) agrees that washing the *limu* immediately after collection is done very carefully.²⁰

The second washing is usually done at home in fresh water (Abbott 1992). Reed (1907), however, reports that certain *limu* do not fare well with fresh water cleaning, which would result in "injuring the flavor," and "very rapid decay." These *limu* include *limu oolu*, *limu lipeepee*, *limu lepeahina*, *limu moopuna-ka-lipoa* and possibly some others. One of Setchells (1905) informants also categorizes *limu* into those that can be stored for extended periods of time (one year or longer) and others that are considered "one day *limu*." The latter *limu* must be eaten the day they are gathered.

Once clean, the *limu* is drained and then chopped (i.e. *limu manauea* - *Gracilaria coronopifolia* J. Agardh, *limu huluhuluwaena* - same as *limu pakeleawa`a*), pounded (i.e. *limu wāwae`iole* - *Codium* spp., *limu lipoa* - *Dictyopteris*

²⁰ It has been my experience that the character of many older Hawaiians is one that supports meticulous actions. *Hana kāpulu* (messy, careless work) is especially looked down upon. To do things right the first time so that you won't have to do it again is the norm. Therefore, I don't find it surprising to see this attitude extending to this practice.

spp.), or soaked overnight (i.e. *limu kohu*, *limu `ele`ele* - *Enteromorpha* spp.) depending on the type of *limu* (Abbott 1996). In addition to breaking the *limu* into smaller, easily eaten bits, chopping and pounding helps to "release the `a`ala (fragrance)" (Abbott 1992). Reed (1907) reports that the *limu* is treated in some combination of breaking, pounding, and chopping.

Light salting is the next step for *limu* that will be consumed in the short term (~1 teaspoon salt/1 cup *limu*) (Abbott 1992). For certain *limu* that is stored for long periods of time, like *lipoa* and *limu kohu*, heavier salting is applied (~1/2 cup salt/1 cup *limu*) (Abbott 1992). As seasonally available species, *lipoa* and *limu kohu* are preserved in this manner for periods of shortage (even 6 months) (Abbott 1992)²¹. In an interview by Larry Kimura of Elizabeth Ewaliko (1974) from Wai`alae, O`ahu, Mrs. Ewaliko

²¹ "Salting" includes "*lomi*" or rubbing in the salt (Abbott - personal communication)

emphasizes salting as an extremely important step ("*kōpī ā miko!*").²²

Like other foods, different types of *limu* are prepared and eaten in many different ways by different peoples. Reed (1907) and Abbott (1996) provide many ways of preparing *limu*, and so I will not delve too deeply into the subject.

Limu fits into the main triad of the Hawaiian diet along with fish and *poi*, and so it is not surprising that the most popular Hawaiian way of eating *limu* is raw, with fish and *poi* (Abbott 1996). While modern preparations include cooking and boiling with other ingredients, only one clearly traditional cooking method was recorded: *limu`aki`aki* [*Ahnfeltiopsis concinna* (J. Agardh) Silva et DeCew] was cooked in the *imu*, or underground oven (Abbott 1992). Reed (1907) reports the use of *limu* in *laulau* which is cooked in an *imu*. In this case, the *limu* substitutes for the *kalo* leaves (*Colocasia esculenta* (L.) Schott) which surrounds a few pieces of meat and the whole bundle is

²² When talking about *limu wāwae`iole*, she talks of preserving it in ocean water or water with salt added. Using fresh water would result in its turning soft and undesirable.

wrapped in *tī* leaves (*Cordyline fruticosa* (L.) Goepfert).

It is unclear if this practice is of pre-contact origin (traditional), though it is certainly possible.²³

Certain combinations of *limu* (*limu wāwae`iole* and *limu līpe`epe`e* [*Laurencia* spp.], *limu manauea* and *limu mane`one`o* [*Laurencia nidifica* J. Agardh]) are preferred by some people, while others (*limu kohu*, *limu `ele`ele*) are generally not "tainted" by mixing with others (Abbott 1996).

Cultivating *limu*

Some information about the traditional cultivation of *limu* is available. *Loko i`a*, or fish ponds, were built in various designs with varying amounts of fresh water intrusion to provide a range of habitats for both fish and *limu*. *Limu `ele`ele*, *limu manauea*, and *limu huluhuluwaena* are examples of *limu* that can still be found growing in various *loko i`a* around the islands (Abbott 1992).

²³ Dr. Abbott comments, and I would agree, that if cooked *laulau* style and steamed for several hours the *limu* would completely disappear or gelatinize (Abbott – personal communication).

Limu was transplanted from one location to another, as is documented in the famous example of *limu huluhuluwaena* which was brought to Waikiki for Queen Lili'uokalani from either Honokōwai, Maui or Moloka'i (Abbott 1996). Living *limu* was brought on rocks, and according to a Pukui interview (1960), little stones with the *limu* covering it were ideal for transplanting purposes. Reed (1907) reports the transplanting of this same *limu* from Hawai'i to a *loko i'a* on Moloka'i by an old chief, and from Hawai'i to Kāne'ohe Bay by yet another chief. She speculates that this may have been a common practice of the chiefs of old when they moved from one island to the next, much like their "best taro and yam plants" that often made the trip.

Yet another example of cultivation comes from the island of Kaua'i in a bay called Moloa'a, where *limu* gatherers actively weed out undesirable *limu* so that the *limu kohu* can proliferate (Reed 1907). This could be a pre-contact "farming" practice that ensured the abundance of *limu kohu* for all living in that *ahupua'a*. Alternatively, this practice could be of recent origin, which would help

bolster yield to meet the large demand for *limu kohu* at the O`ahu markets.

Other small scale cultivation practices also exist. There is a group of people at `Ewa, O`ahu, led by Mr. Walter Kamanā, who are "re-seeding" the once luxuriant beds at One`ula Beach Park with different edible *limu* collected from Maui. The method I observed them using was to *haku*, or braid, *limu* with raffia into a circular lei approximately 18 cm (9 inches) in diameter. Regrettably, I was not able to witness the method of "planting" these lei or the success of establishment.

CHAPTER 3: METHODS

While searching for documented ethnobotanical methods to emulate in my research, it soon became clear that certain methods were uncomfortable for me or did not apply to the type of research that I was interested in. A few of these include the use of field forms with standard questionnaires (Given and Harris 1994), structured interviews (Alexiades 1996), and all types of quantitative methods. Finding the appropriate methods to suit my style became a melding of methods from different sources. Given and Harris (1994) put it best by explaining that "although there are some general basic principles (in ethnobotany), its detailed methodology must reflect the kind of flora of a region, and level and type of culture of the people living in that region."

Database Compilation

The database compilation was the first goal of this research project. In order to fulfill this goal a literature search was conducted at the Hamilton Library at

the University of Hawai`i at Mānoa and at the Bernice Pauahi Bishop Museum Library. In addition to the literature search, I listened to audio recordings of interviews with *mānaleo* (native speakers of Hawaiian).²⁴ Some of these interviews were conducted by Larry Kimura on a radio show that aired in the 1970s called *Ka Leo Hawai`i*. These recordings are housed at the Moore audio lab at U.H. Mānoa. The other interviews were conducted by Mary Kawena Pukui between the 1950s and 1970s. These recordings are housed at the Bernice Pauahi Bishop Museum Library. Both sources interviewed *mānaleo* to cover a range of topics including personal histories, experiences, information relevant to Hawaiian culture, opinions, etc.

Information gleaned from these sources was then organized into an alphabetically arranged relational database using Microsoft Excel®. Information was organized under the following headings: *Limu* name (Hawaiian), Source,

²⁴ I was not able to listen to all of the audio recordings that referenced *limu* due to time and policy restrictions of both institutions. Appendix E gives reference information for all audio recordings (from *Ka Leo Hawai`i* and Mary Kawena Pukui interviews) that include a reference to *limu*.

Page Number, Information, Synonyms, See Also, Shared Names, and Latin Names. In addition to the literary and audio sources, new information obtained through my own interviews was also included in the database.

Interviews

Conducting interviews with *limu*-knowledgeable people was the second goal of my research. The methods used for finding sources, discussing *limu*, and recording information were rather basic. The keys to being successful in meeting people and encouraging their participation in my study were honesty, familiarity with cultural norms, and respect.²⁵ Being part of the culture and having a genuine interest and desire to learn from my own culture was my biggest asset.

Finding people who have knowledge of *limu* started with talking to family and friends. I compiled a list of possible *limu*-knowledgeable people and, depending on how

²⁵ I was forewarned by `Anakala Eddie Kaanana, a *kupuna* (elder) that I love dearly and respect immensely, that it is very important to carry yourself properly and to approach and treat *kupuna* the right way. He said the wrong etiquette will lead to them "giving you the run around, that's for sure!" I can attest to this because I have heard numerous stories of this happening and have seen it happen to people, too.

familiar I was with each person, I either contacted the person myself by phone or had the linking person contact him/her for me first. If needed, I would introduce myself, and then explain my interest in *limu*, the purpose of my research, and the culminating product of the research being a Master's thesis paper. If the person was comfortable in teaching me what he/she knew about *limu* I would set up a meeting.

In explaining my research, I discussed the gap between the abundance of *limu* names on record, and the dearth of identifications. I shared my desire to learn the names of the different kinds of *limu* and how to use them.

Upon meeting an informant, I would bring some kind of token of my appreciation.²⁶ Sometimes this was a little food (i.e. poke, poi, jam, or bread, something small), or a book (*Limu* by Dr. Abbott), or the list of Hawaiian *limu* names that I was compiling (Appendix B), or some combination of the above items. I again explained my purposes for studying

²⁶ A *`ōlelo no`eau*, or Hawaiian proverb, explains this custom (Pukui 1983). "*I hele i kauhale, pa`a pū`olo i ka lima*. In going to the house of others, carry a package in the hand. Take a gift."

limu and emphasized that before finalizing my report I would let each informant review their own contributed information to make sure that the information was accurate. Final consent from each informant was requested after all editing revisions and/or omissions were made.

The interview process varied from one informant to the next. If possible, meetings were arranged to be at the site(s) where the informant regularly goes to pick *limu*. As a participating observer (Alexiades 1996), I would simply follow the lead of the informant as they would show me where the different *limu* grew, the names of the *limu*, how to pick the *limu*, etc. If I found other interesting *limu* I would inquire about these *limu* for names and uses. After picking *limu*, we would go to a spot where we could clean the *limu* and I would test my memory by reciting the names and uses for each. This was good practice for me and it verified the information and sometimes sparked additional information from my informant. I then explained the method of preparing herbarium vouchers for the purpose of attaching information to an actual *limu* specimen. Once I

felt that I had taken up enough of the informants' time, I made sure that I had all the information needed to fill out the Personal Information Sheet (Appendix C) for that informant.²⁷ The information sheet provided me with some background information for each informant and the source(s) of their information.

If picking *limu* couldn't be arranged, I would set up a meeting to "talk story", or to conduct an unstructured interview (Alexiades 1996) where the conversation is casual and unstructured, but purposeful. If I felt comfortable asking, I requested to record the conversation for accuracy.²⁸ Usually after explaining my interest and purposes for studying *limu*, the informant would naturally discuss the different types of *limu* that he/she is accustomed to using. I occasionally asked questions about the appearance of certain *limu* or where it can be found

²⁷ Personal information usually surfaced naturally when "talking story."

²⁸ Through the course of my research, I found that asking to record the interviews was more of a personal obstacle than something that my informants felt uncomfortable with. It made me feel like my work was suspicious and not genuine. However, Dr. Abbott informs me that the older people that she and Mrs. Williamson interviewed in the 1970s were distracted by a recording machine, so they gave it up (Abbott - personal communication)

growing if this information wasn't covered. If the opportunity arose, I arranged an additional meeting so that I could bring some *limu* that I was curious about (including *limu* that I thought he/she discussed) in order to make identifications and herbarium vouchers ("Plant Interview" — Alexiades 1996).

Herbarium Voucher Construction

Herbarium vouchers were prepared by allowing the *limu* to dry on standard 11.5" x 17" herbarium paper using a method taught to me by Dr. Celia Smith of the University of Hawai'i Botany Department. In order to press and dry the *limu* specimens, "voucher sandwiches" were made with these items arranged in the following order: corrugated cardboard (12" x 18"), newspaper (4 -8 ply), herbarium paper, *limu*, wax paper, newspaper (4 - 8 ply), cardboard, (repeat sandwich). Heavy weights were placed on top and the whole press was allowed to dry for a week to two weeks. The press was checked daily to replace wet newspaper and to remove herbarium vouchers which were already dry. If the *limu* did

not stick naturally to the paper, glue was used. Herbarium voucher labels were prepared and attached to the voucher with the following information provided: Hawaiian *limu* name with source and likely place of name origin (depending on where the informant learned of the *limu* name), Latin name with authority, site (description, habitat, substrate, location), collector(s), date, determiner (of Latin name), and collection number. A list of the herbarium vouchers is included under Appendix D. The herbarium vouchers were submitted to the National Tropical Botanical Garden herbarium for preservation.

Equipment

Equipment used during research included a Sony digital recorder (IC Recorder ICD-MS1), Sony digital camera (CyberShot DSC-P1) with underwater housing, and 35 mm film camera (Canon Rebel 2000).

Limu List Construction

A "List of *Limu* Names" (Appendix B) was constructed in order to have a list of Hawaiian names that could be given to informants. This list was extracted from the database. New names were added to the list as they were encountered in interviews. Many of these entries are duplicated names with slight variations in spelling or entirely different regional names applied to the same *limu*. Because some sources used the Hawaiian `okina (glottal stop) and *kahakō* (macron) and others didn't, both were left out. The total amount of names included in this list should not be mistaken for the total amount of *limu* named by Hawaiians.

CHAPTER 4: RESULTS

Informants

Informants interviewed are given below together with background information, and lists of *limu* discussed for each informant interviewed.

Sam Ah Quin lives in Lā`ie, O`ahu. He learned most of his *limu* information from the late Helen Hoopii Kenolio from Kihei, Maui. The Hawaiian *limu* names that he discussed were *huluhuluwaena*, *manauea*, *wāwae`iole*, *līpe`epe`e*, *`ele`ele*, *kohu*, *līpoa*, *māne`one`o*, *owakawaka*, *kala*, and *`opihi*.

Carol Anamizu lives in Kahuku, O`ahu but she was born and raised on Moloka`i. She learned most of her *limu* information from Moloka`i. Mrs. Anamizu, Joy Anamizu (daughter), and I picked *limu manauea* together at Kahuku Point.

Ulu Garmon lives in Keaukaha, Hawai`i. She was also born and raised there. She is one of the daughters of the

late Edith Kanaka`ole.²⁹ The Hawaiian *limu* names that she discussed were `aki`aki, alani, huna, `ele`ele, huluhuluwaena, hulu`ilio, limu kala, pūhā, pahe`e, kāhili, pālahalaha, manaua, wāwae`iole, and līpoa.

Jeanette Kaualani Akiu Howard lives in Punalu`u, Hawai`i. She was born right at Punalu`u beach and still lives a block away from where she was born (1923). She also runs a lei and memorabilia stand at the beach. She learned about *limu* from her grandmother. She and I picked and discussed *limu huluhuluwaena, kō`ele`ele, limu `ele`ele, līpe`epe`e, `aki`aki, limu kohu, limu kala* and *pālahalaha*.

Joseph "Blondie" Kaina lives in Hāna, Maui. Born (1943) and raised there, Uncle Blondie is one of the town's most renowned fishermen. He is part of the "*akule hui*", a group of fishermen that surround *akule* (big-eyed scad fish) and divide it out to any persons who come to help open fish out of the nets. We met and discussed *limu* in the *hale*

²⁹ Aunt Edith is one of the most highly revered expert/practitioner/educator of Hawaiian culture. She was a master chanter, *kumu hula* (*hula* instructor), and *haku mele* (song composer). Perhaps her most famous composition, "*Ka Uluwehi o ke Kai*", talks about the delicious *limu* of the ocean – *lipoa, limu kohu, pahe`e, līpalu*.

kilo, a thatched house, that was built on Ka`uiki Hill overlooking Hāna Bay. The "*akule hui*" built this hale at this lookout spot, where they go daily to observe the *akule* schools. Meetings with Uncle Blondie often turned into discussions between many different fishermen including Wilfred Kala, John Kiambao, Masu Hashimoto, Milton Diego, and others. The *limu* names discussed at the *akule hui* were *nei*, *pe`epe`e*, *limu pehu*, *nānui*, *limu make*, *limu kala*, *līpoa*, *limu kohu*, *wāwae`iole*, *huluhuluwaena*, *limu `ele`ele*, *limu lauoho*, *ilīau*, *enenue limu*, and *turtle limu*.

Kawika Kapahulehua lives on O`ahu, but was born in Hilo and raised on Ni`ihau. His mother was the source of his *limu* information. `Anakala Kawika is a native speaker of Hawaiian language and he is part of the University of Hawai`i at Mānoa's Mānaleo program. This program brings in Hawaiian language native speakers to help students learning Hawaiian language. Anyone can visit and talk story with these native speakers to improve their Hawaiian. He discussed two types of *limu*, *limu `ula* and *limu kanaloa*.

John Lind is the son of Daisy Lind, a well known kupuna in Hāna, both of whom live in Kipahulu. Uncle John told me about how he replants *limu kohu* "roots" that he accidentally brings home when he picks *limu*. His method is to stuff the holdfasts into small holes in the reef.

Ipo Wong is from Ni`ihau and is also a native speaker of Hawaiian involved with the Mānaleo program at U.H. at Mānoa. She discussed *limu kohu* and *līpoa* on Ni`ihau.

Data

Data collected from the literature, audio records, video records, and interviews are organized in the *Limu* Database (Appendix A). The information gleaned from audio and video records as well as interviews has been extracted from the Limu Database and is presented in the same table format within this results section (Table 1).

Table 1
Audio/Video/Interview Data

LIMU NAME	SOURCE	TYPE	INFORMATION	SYNONYMS	VOUCHER # & LATIN NAME
'a'ala'ula	Kauahipaula	Video: 'AM	Pālahalaha. Nui ka ulu 'ana, koku 'ūpī.		
'aki'aki	Haanio	Audio	Ka 'ai kela a ka honu. 'A'ole 'ai 'ia ma mua. Lohe 'o ia 'ai ka Pilipino. Kupa a mo'a a palupalu. 'A'ole kēlā he 'ai na ka Hawai'i.		
'aki'aki	Howard	Interview	She doesn't eat this limu but it grows all over the rocks in Puna.		KA067LIMU <i>Ahrfeltiopsis concinna</i> (J. Agardh) Silva et DeCew
'aki'aki, limu	Garmon	Interview	Used in cursing.		
alani, limu	Garmon	Interview	One type is edible and the other is poisonous (and used for stunning fish). Both resemble fipoa but are softer.		
'ele'ele	Ah Quin	Interview	Mullet eat the young 'ele'ele. Awa kalamoho eat the long limu. Laniakea's kau is July - August.		
'ele'ele, limu	Kaina	Interview	Also limu lauoho.	limu lauoho	
'ele'ele, limu	Kaalakea	Audio	If there is fresh water, get. If there is no fresh water, no limu 'ele'ele.		

Table 1

Audio/Video/Interview Data

LIMU NAME	SOURCE	TYPE	INFORMATION	SYNONYMS	VOUCHER # & LATIN NAME
'ele'ele, limu	Ewaliko	Audio	<p>\$4/quart, limu 'ele'ele, ho'okomo i loko o ka stew meat. Nā kau o ka limu, 'elua manawa o ka makahiki, puka mai kēia limu. When ua, wash all the dirt, pāu ka lepo, a laila ulu mai ka limu, ma'ma'e. Huki me ka lima a ho'oma'ema'e.</p> <p>Luhi ka hana 'ana. Aia a miko, 'ono. 'A'ole 'ala ka limu i kēia mau lā, nui nā mea o ke kahawai e holo nei. I pule ka waiho 'ana i loko o ka 'ōmole ma ka pahu hau. Have to freeze it after. Uliuli, 'o ia ka pololei. Pāla mai ma hope (hākeakea mai).</p> <p>'Oi aku ka uliuli ma mua o ka pala. 'O ka mea hou ka mea pokopoko. Ma Kahala Hilton.</p>		
'ele'ele, limu	Kauahipaula	Video: 'AM	Ke kau ka limu 'ele'ele, loloa.		
'ele'ele, limu	Garmon	Interview	This limu likes to grow where there is some flow in the water (fresh). You collect it by pinching a little at a time so it doesn't get sandy.		
'ele'ele, limu	Aiona	Interview	My dad told me about his mother picking 'ele'ele and that when they went to pick it, they needed to do it VERY carefully so no sand would be mixed in with it. She would give them lickings if it were sandy.		
'ele'ele, limu	Howard	Interview	She picks up this limu at Punalu'u Beach, growing on the rocks and in the sand at the intertidal area (where the freshwater springs are).		KA062LIMU <i>Enteromorpha prolifera</i> (Muller) J. Agardh
enenue limu	Diego	Interview	Red with leaves, skinny on bottom and branching on top, smooth. Also called turtle limu		
General Limu	Haanio	Audio	'A'ole nui loa i kēia manawa. Kāpulu kahakai, lepo. Ma mua, kapu kahakai, 'a'ole kāpulu 'ia. Ma mua he wahi no ka 'au'au, 'a'ole 'au'au ma nā 'ano wahi like 'ole.		

Table 1
Audio/Video/Interview Data

LIMU NAME	SOURCE	TYPE	INFORMATION	SYNONYMS	VOUCHER # & LATIN NAME
General Limu	Ellis	Video: 'AM	Remembers eating 'ele'ele, lipoa, lipe'epe'e, limu wawae'iole.		
General Limu		Video: 'AM	A list is prepared of limu: limu kohu, limu lipoa, limu 'ele'ele, limu manauca, limu kala, limu lipe'epe'e, limu wawae'iole, limu huluhuluwaena, limu 'opihi.		
General Limu	Kaanana	Video: 'AM	'Ako i ka limu.		
General Limu	Serrano	Video: 'AM	Remembers eating kohu, 'ele'ele, manauca, lipoa, lipe'epe'e. If you huki the limu it will be gone, 'ohi limu is the correct way. Lipoa is eaten with fish, lipe'epe'e is salted and eaten with poi or 'ōpelu. These days there isn't limu like before.		
General Limu	Kaina	Interview	Maka'alae is the main spot for limu in Hāna. Hāna does not have certain limu like Lahaina side like huluhuluwaena, ogo, etc. Those types of limu like dirty water, where Hāna has clean water. Lots of rain makes the limu grow long. The 'ōpū of the enenue has limu that you can rinse and eat with poke.		
General Limu	Keohokalole	Video: 'AM	'Ohi limu ke ma'ema'e ke kai. Kai nui, nui ka lepo. Nui ka limu ma Kāne'ohe. Remembers 'ele'ele and huluhuluwaena.		
General limu	Ah Quin	Interview	Manawea, waiwai'cole, li peepee, kohu, lipoa, hulu hulu waina, maneo neo, owaka waka, kala, opihi (2 types), node, ribbon. Kau - season thereof. Kihei - Garden of Eden. Turtle feed from July to September at Kawailoa, O'ahu. Pollution and overharvesting changed the limu. His kumu was mostly Helen Ho'opi'i Kenolio - "Limu Lady of Maui" - Kihei. Foreign limu is taking over the reefs. When gutting fish, you can observe the types of limu that fish eat.		
General limu	Kaalakea	Audio	Kopekope i ka limu a hana po'opo'o. 'Oko'a ka limu i kēia manawa.		

Table 1
Audio/Video/Interview Data

LIMU NAME	SOURCE	TYPE	INFORMATION	SYNONYMS	VOUCHER # & LATIN NAME
hinakea	Haanio	Audio	Limu kama'āina o Kona. Ulu palaha ma ka pōhaku pāhoehoe. Kopekope me ka pahi, ku'i i ka hale. Limu kai kēlā, 'a'ole 'ai pa'a like me ka lipe'epe'e..." 'A'ala, 'ono.		
hinaula	Haanio	Audio	Limu kama'āina o Kona. Ulu palaha ma ka pōhaku pāhoehoe. Kopekope me ka pahi, ku'i i ka hale. Limu kai kēlā, 'a'ole 'ai pa'a like me ka lipe'epe'e..." 'A'ala, 'ono.		
huluhuluwaena	Ah Quin	Interview	With ake. With squid.		
huluhuluwaena	Kaalakea	Audio	Mixed with ake.		
huluhuluwaena	Ewaliko	Audio	Ma Kahala Hilton. Ulu pū me ka limu uliuli. Ho'ohui 'ia me ke ake. 1 kālani huluhuluwaena, 5 kālani ake. 'Ula'ula kēia limu.		
huluhuluwaena	Kaina	Interview	Mixed with ake.		
huluhuluwaena	Garmon	Interview	Grows on coral. Her grandmother was the "ake person" of her time - she was famous for making the huluhuluwaena with ake (raw beef liver) for everyone. Then her mother (Aunt Edith) became the "ake person".		
huluhuluwaena, limu	Howard	Interview	Picks up this limu at Punalu'u Beach (Hawai'i) growing in the shallow area in the sand (where there is fresh water springs under ground).		KA065LIMU <i>Grateloupia filicina</i> (Lamoroux) C. Agardh
hulu'ilio	Garmon	Interview	This limu is soft like wool (recognized from picture in Magruder book).		

Table 1
Audio/Video/Interview Data

LIMU NAME	SOURCE	TYPE	INFORMATION	SYNONYMS	VOUCHER # & LATIN NAME
huna	Garmon	Interview	Doesn't eat this type of limu (recognized from picture in Magruder book).		
iliau	Kaina	Interview	Lawalu or boiled and then fed to the enenue. It gives them diarrhea. Come back 1-2 days later and hook them with the same limu tied to the hook. Also gives pig diarrhea. If in the sun, turns yellow.		KA034LIMU <i>Ahnfeltiopsis concinna</i> (J. Agardh) Silva et DeCew
kāhili	Garmon	Interview	This is the really tough limu that looks like a kāhili (<i>Turbinaria ornata</i>).		<i>Turbinaria ornata</i> (Turner) J. Agardh
kala	Ah Quin	Interview	Enenue feed on kala, ribbon, etc.		
kala, limu	Kaina	Interview	Certain type is eaten. Some people cook it to soften it.		
kala, limu	Ewaliko	Audio	'A'ole 'ai 'ia, he maunu a he lā'au. Kekahi po'e 'oki'oki a 'ai.		
kala, limu	Garmon	Interview	Never ate limu kala, it was used ceremonially.		
kala, limu	Kaanana	Interview	According to the old stories, the kūkini (the chief's fastest runners) would use limu kala to wrap living fish that the chief desired and bring them long distances to the chief (and it would still be living).		
kala, limu	Howard	Interview	She doesn't eat this one.		KA066LIMU <i>Sargassum echinocarpum</i> J. Agardh

Table 1
Audio/Video/Interview Data

LIMU NAME	SOURCE	TYPE	INFORMATION	SYNONYMS	VOUCHER # & LATIN NAME
kanaloea, limu	Kapahulehua	Interview	A type of edible limu.		
kihe	Haanio	Audio	'Ai me ka 'opihi, i'a maka. Limu kama'āina o Kona. Limu kai kēlā, 'a'ole 'ai pa'a like me ka līpe'epe'e..." 'A'ala, 'ono.		
kohu	Ah Quin	Interview	Color and iodine depends on area gathered. November , April is kau. Red one has low iodine.		
kohu, limu	Kaina	Interview	The best. Crisp, strong smell. Lots of rain makes limu grow , the kohu can get really long.		KA002LIMU <i>Asparagopsis taxiformis</i> (Delile) Trevisan
kohu, limu	Poepoe	Video: TME	Mo'omomi has the best limu kohu. There are two ways to pick limu: cutting, pulling but leaving the roots behind.		
kohu, limu	Ewaliko	Audio	\$20' ōmole (quart), limu kohu. Aia i waho loa kēia limu, 'ula'ula. Wae 'ia ka mea a pau a ho'okū i loko o ka wai pa'akai. I kekahi lā, helele'i mai ka lepo a pau loa. A ma'ema'e, 'oki'oki a kōpī hou. Ke huki mai 'oe, hemo pū mai nō me ke one, a lawe 'oe i ka mea o lalo aia ka limu i luna. 'O lalo, aia i laila ke kumu.		
kohu, limu	Wong	Interview	About four days after it rains, you can go get the limu kohu. This is the main limu eaten on Ni'ihau.		
kohu, limu	Kauahipaula	Video: 'AM	Huki i ka limu kohu.		

Table 1
Audio/Video/Interview Data

LIMU NAME	SOURCE	TYPE	INFORMATION	SYNONYMS	VOUCHER # & LATIN NAME
kohu, limu		Video: 'AM	Ki'i 'ia i ka manawa kai malo'o ma hope o ka ua nui. Ho'okū i loko o ka wai a ao ka pō, a laila e ho'oma'ema'e a kōpī i ka pa'akai.		
kohu, limu	Ellis	Video: 'AM	Kaua'i's kohu is loloa (long) where it is 'oki 'ia. O'ahu's kohu is pokopoko (short).		
kohu, limu	Lind	Interview	Method for planting limu kohu. Take back the roots (holdfasts) that sometimes come out when picking this limu, and stuff them into little holes in the reef where limu kohu normally grows.		
kohu, limu	Howard	Interview	She picks up this limu at a place called laupapa 'ōhua (reef with manini fish babies).		KA061LIMU <i>Asparagopsis taxiformis</i> (Delile) Trevisan
kō'ele	Howard	Interview	She picks up this limu at a place called laupapa 'ōhua (reef with manini fish babies). This limu is eaten with 'opihi.	kō'ele'ele (also nei)	KA064LIMU <i>Ahnfeltiopsis flabelliformis</i> (Havey) Masuda
kō'ele, limu	Ellis	Video: 'AM	Uaua. Ulu me ka hā'uke'uke.		
kō'ele'ele	Howard	Interview	She picks up this limu at a place called laupapa 'ōhua (reef with manini fish babies). This limu is eaten with 'opihi.	kō'ele (also nei)	KA064LIMU <i>Ahnfeltiopsis flabelliformis</i> (Havey) Masuda
lepe-a-Hina, limu-a-Hina	Ah Quin	Interview	Red and slimy. Eaten with lemon and soiū.		
līpe'epe'e	Ewaliko	Audio	'Āina Haina. Crunchy. 'Oī aku ka 'ono o ka līpe'epe'e ma mua o ka manaua.		

Table 1
Audio/Video/Interview Data

LIMU NAME	SOURCE	TYPE	INFORMATION	SYNONYMS	VOUCHER # & LATIN NAME
līpe'epe'e	Keohokalole	Video: 'AM	Season is Kekemapa, New Year. Kualoa has that kind of good limu.		
līpe'epe'e	Kauahipaula	Video: 'AM	Ma Nānākuli. Aia i lalo o ka 'aki'aki		
līpe'e'pe'e	Haanio	Audio	Loa'a ma Kona, 'a'ole nui.		
līpe'e'pe'e	Howard	Interview	She picks up this limu at a place called laupapa 'ōhua (reef with manini fish babies).		KA068LIMU <i>Laurencia</i> sp.
līpoa	Kaina	Interview	There are different kinds of līpoa.		
līpoa	Wong	Interview	The kala and nenua eat the līpoa. On Ni'ihau, there is a lot of līpoa, but the Ni'ihau people consider it 'ōpala (rubbish). When it is the right season, the ocean is thick with līpoa and it washes up on the sand making a very strong smell.		
līpoa	Haanio	Audio	Loa'a ma Kona, 'a'ole nui.		
līpoa	Ewaliko	Audio	Holoī nō 'oe, kaka 'oe a 'oki'oki. Ho'okomo i loko o ka 'ōmole. Maunahua used to be (Hawai'i Kai now). He manawa nō e pae mai. 'A'ole hana lei 'ia, he mea'ai wale nō.		
līpoa	Ellis	Video: 'AM	Waikiki is onaona i ka līpoa.		
līpoa	Ah Quin	Interview	Kau is February on Maui.		

Table 1
Audio/Video/Interview Data

LIMU NAME	SOURCE	TYPE	INFORMATION	SYNONYMS	VOUCHER # & LATIN NAME
lipoa	Garmon	Interview	Her all time favorite limu is lipoa.		
lipu'upu'u	Keohokalole	Video: 'AM	Eaten with salt salmon.		
make, limu	Kaina	Interview	Out Muolea side.		
manauea	Ewaliko	Audio	Palupalu mai ko kākou manauea ma mua o ka ogo. 'Oki'oki e like me ka limu kohu. 'A'ohe maika'i ka mea pu'upu'u. Nānā 'oe i ka mea 'akahi nō a puau (?) mai i nuna. Ki'i i ka mea hā'ula, maika'i. 'Āina Haina.		
manauea	Kaalakea	Audio	Pakēpakē ke hou. Palahē mai i ka wai wela.		
manauea	Haanio	Audio	'Ai 'ia, he mea ho'ohuihui.		
manauea	Garmon	Interview	Recognized from picture in Magruder book.		
manauea	Anamizu	Interview	Kahuku Point still has a lot of manauea growing in the limestone depressions. If you're not going to eat it all, it can be preserved with some salt in a jar and refrigerated.		KA059LIMU <i>Gracilaria coronopifolia</i> J. Agardh

Table 1
Audio/Video/Interview Data

LIMU NAME	SOURCE	TYPE	INFORMATION	SYNONYMS	VOUCHER # & LATIN NAME
nanui	Kaina	Interview	Looks like lipoa. It is also eaten. It has a stronger smell than lipoa and you can smell it when driving on Hāmoa Road sometimes. It has seasons when it floats in and is eaten by the enenue. When you cut the `ōpū of the enenue, you can rinse the insides and mix that limu (which is already chopped up for you) with the poke.		
nei	Kaina	Interview	`Opihi limu, oldtimers eat with `opihi (picked when dark). Smooth and crunchy.	(also kō`ele, kō`ele`ele)	KA028LIMU <i>Ahrfeltiopsis flabelliformis</i> (Havey) Masuda
ogo, limu	Ili	Video: `AM	`Ohi i ka limu. Before, limu ogo was rubbish.		
ogo, limu	Keohokalole	Video: `AM	Nui ma Kualoa.		
opihi limu	Ah Quin	Interview	1) Green with clusters. 2) Long red.		
`opihi limu	Ewaliko	Audio	Hiki nō ke `ai.		
`opihi, limu	Kaalakea	Audio	Pupupu kona `ano. Kukū `o lalo.		
`opihi, limu	Ellis	Video: `AM	`A`ole maopopo ka inoa maoli.		

Table 1
Audio/Video/Interview Data

LIMU NAME	SOURCE	TYPE	INFORMATION	SYNONYMS	VOUCHER # & LATIN NAME
owakawaka	Ah Quin	Interview	Dark brown, lettuce like, brittle.		
'owakawaka	Keohokalole	Video: 'AM	Type of limu.		
pahapaha	Ewaliko	Audio	Pae mai nō 'o ia, uliuli. 'Ai ka po'e kepani, 'oki'oki me ka soiū a he aha iā.		
pahe'e	Haanio	Audio	Ulu ma ka lae o Pāhe'ehe'e ka inoa. Ho'okahi ulu 'ana o ka makahiki.		
pahe'e	Garmon	Interview	Recognized from picture in Magruder book.		
pakeleawa'a	Sanborn	Audio	Limu planting. They did it. "Chop-chop" is taken on small stones. Don't uproot. Doesn't grow in rough water, likes sand. Grows at low tide, long. More 'ono at some places because of the spring water. <i>If a woman is pe'a, 'a'ole hele i ka hana, haumia. 'A'ole komo i ke kai.</i>		
pākoa	Ewaliko	Audio	Pahe'e loa. Ulu i luna o ka pōhaku a me ke one. Palupalu, kohu kilika.		
pālalahala	Garmon	Interview	Put into soup after you turn the fire off (recognized from picture in Magruder book).		
pālalahala	Howard	Interview	She doesn't eat this limu but she knows some people eat it with shoyu (Japanese style).		KA063LIMU <i>Ulva fasciata</i> Delile

Table 1
Audio/Video/Interview Data

LIMU NAME	SOURCE	TYPE	INFORMATION	SYNONYMS	VOUCHER # & LATIN NAME
pe'epe'e, limu	Kaina	Interview	Grows in cracks, plenty down Maka'ala. Old kind has coral sometimes, so you shouldn't pick that one.		
pehu, limu	Kaina	Interview	Looks just like kohu, except it flattens when taken out of the water. Doesn't have a strong smell like kohu and it tastes hot. He knows of one guy that puts it in his stew to give it a hot flavor.		
puha	Garmon	Interview	Seasonal limu that likes water flow (recognized from picture in Magruder book).		
turtle limu	Kaina	Interview	Green limu that grows down Hāna Bay.		
turtle limu	Diego	Interview	Red with leaves, skinny on bottom and branching on top, smooth. Also called enenue limu		
'ula, limu	Kapahulehua	Interview	Red, looks like lipoa.		
wāwae'iole	Ewaliko	Audio	Aia nō i waho. 'A'ole makemake i ka mea pae mai. Kī'i i ka mea, aia nō ma laila. 'A'ole maika'i ka mea nunui loa, ka mea makali'i mai nō. 'O ka mea makali'i mai ka mea helu 'ekahi. Pipili i ka 'ako'ako'a. "Hana 'oe me ka ma'ema'e, 'ai nō 'oe me ka ma'ema'e, 'a'ole kāpulu." Lawe i kālani kai a ho'okomo ka wāwae'iole, mau nō ke kō'i'i, 'a'ole palupalu. Palupalu i ka wai maoli. Inā 'a'ole kai, pa'akai, kōpī a miko.	'a'ala'ula	
wāwae'iole	Kaina	Interview	Hāna mostly has the kind that lies flat on the rocks, not the one that branches upright from the sand and sways.		KA060LIMU <i>Codium arabicum</i> Kützing
wāwae'iole	Garmon	Interview	Recognized from picture in Magruder book.		

Table 1
Audio/Video/Interview Data

LIMU NAME	SOURCE	TYPE	INFORMATION	SYNONYMS	VOUCHER # & LATIN NAME
wawae`iole, limu	Keohokalole	Video: 'AM	Has at Hau`ula.		

Discussion

Of the 229 distinct Hawaiian limu names compiled, 172 were unduplicated names (i.e. "*pe`epe`e*", "*pe`epe`e, limu*", "*lipe`epe`e*" are all considered duplicates).³⁰ The association of 36 names with actual *limu* has been documented through previous studies (of which I am confident because of confirmations through my studies), the association of 5 names with actual *limu* has been documented through this study, and 87 names have documented information about them but have not been associated with actual *limu*.³¹ This may be one of the largest lists of indigenous folk names for edible algae in the world. With half of these names unassociated with actual *limu*, there is a need to further this research and record these associations.

Through meeting people who use and have knowledge about *limu* I was able to learn a great deal. Therefore, I accept the first hypothesis, concluding that there are

³⁰ There are probably more duplicates in this list of 172 names but they haven't been identified yet.

³¹ See Appendix B for the breakdown of this data.

people remaining who can recognize and identify Hawaiian *limu*. Hearing Hawaiian names of *limu* that I had only previously read about made for exciting times. It's a very good feeling when you have found someone that knows other *limu* names that you have not heard of before. A diminishing breed, the *limu* gatherers are still around. I anticipate that the current trend of fewer people learning about the "less famous" *limu* will continue and efforts to record such information will become progressively more difficult.

There was a wide range of information gathered from various informants and from the literature search. Approximately 10% (103 out of 980) of the data entries in the *Limu* Database came from oral interviews that I conducted or were recorded by audio/video (Ka Leo Hawai'i, etc.). Though my main interest was in recording the Hawaiian names and uses along with collecting the samples, other types of information including distributions, seasonality of *limu* for different locations, and interesting anecdotes were also brought forth. For example, it is clear that there are certain types of *limu* that are

seasonal (i.e. *limu pahe`e*, *limu `ele`ele*, *lipoa*) while others can be found year around (i.e. *limu kohu*, *limu wāwae`iole*). And then there are certain times that are good for picking *limu* (i.e. during the quarter phases of the moon because of the mild tide fluctuations making it less likely that the *limu* will be "sunburnt", or a couple of days after heavy rains for *limu kohu* because the *limu* will be longer). While all informants knew intimately what kinds of limu were in their own "backyard", some were even aware of distributions of certain limu (especially the kinds not available at home) for other parts of the island. For example, Blondie Kaina told me that *limu huluhuluwaena*, *limu `ele`ele*, and *limu ogo* among others can't be found in abundance in Hāna or on the East side of Maui in general, but that these were *limu* that thrive in the waters of Kīhei, Lahaina, Kanahā, etc. probably because of the water conditions (nutrients, temperature, salinity, etc.). While information about distribution and seasonality of *limu* gained from this research was more anecdotal, future research focusing on these aspects for different types of

limu could be very useful and important for tracking the change of *limu* availability over time.

A common theme that I encountered was that the *limu* isn't like it used to be. Whether the taste is different or it isn't abundant like before, it seems that the *limu* is changing because of social and environmental changes. The reasons for this change, according to some of the informants (Elizabeth Ewaliko), are a combination of pollution of our waters and greediness of some people who take everything they can get. The trend seems to be the same for fish according to many casual conversations with old-timer fisherman who can reminisce about more abundant times.

The informants I spoke with agreed that picking *limu* should not be done by pulling and uprooting the *limu*, but by carefully plucking the *limu* to leave behind the holdfasts. By using this collection method, you would also be conserving the resource and assuring that there would be more upon your return. None of my informants were commercial fishermen and each was tied very closely to

their respective places where they "pick up" *limu* because of their long tradition of gathering at those places³² and because it was their home area, so this may have had a bearing on the methods that they used (sustainable harvest for the family versus harvest for economic gain).

As far as uses other than edible, only Aunty `Ulu Garmon mentioned ceremonial use (*limu kala*) and one used for cursing (*limu `aki`aki*). This may be because I did not ask specifically for these uses or because I spoke with people who primarily use *limu* for food and this was my obvious interest during interviews. Perhaps if I interviewed *kahuna* (*lā`au lapa`au*) I might have learned more about medicinal and ceremonial uses of *limu*.

Admittedly, my second hypothesis is a complex statement that is easily supported. Simply find a single informant that can tell you what, how, where and why they pick *limu* and it's just about covered. The real question is how much and what kind of traditional knowledge about *limu*

³² Place is an important component of Hawaiian culture because of the connection one has to the land, people, culture, and history of one's birthplace. If the connection is strong it will translate into pride and result in care of the place.

is still kept in the minds of modern practitioners as compared to earlier times and how much of the old knowledge is left. For the purpose of this report and based on what I did learn from my informants, I also accept the second hypothesis that there was a wide range of *limu* knowledge that different informants covered. The crucial question, however, still remains- how does the current collective pool of traditional *limu* knowledge compare with the same pool 100 years ago (or 200 years ago, or 100 years from now for that matter!)? Part of this question was answered in the reflections of a few informants reminiscing of the old folks that they remember and revered who used to know "all the *limu* and their uses".

This question about the direction that the information that we desperately try to record and conserve is going made me question how this body of information evolves. My initial belief was that the pool of traditional information can only get smaller because of the inability of a person to pass on absolutely all knowledge to another. This might be true, depending on the definition of "traditional." One

of the personal hurdles that this research project has allowed me to 1) identify, and 2) accept and overcome, is the ideal that young Hawaiians are often searching for in their quest to gain knowledge about our culture and history. This ideal is the search for information, whether it pertains to culture, history, botany, etc., that pre-dates contact with Captain Cook in 1778 because of its "true and untainted" nature, which makes it "traditional." My quest was the same, to be able to identify what information/practices was "truly Hawaiian", and what was developed/introduced/modified after contact. This ideal was becoming an obstacle for me because it was becoming the tool that I used to gauge all information. "Is this traditional or is this post-contact?" It was a problem because it devalued information that was gained through experience. It also dictates that things cannot be given Hawaiian names, or practices cannot be evolved without the stigma that they are "non-traditional." This is a problem for me because we are Hawaiian. No more and no less than the Hawaiians pre-Captain Cook. This research has taught me

to discard my ideals of traditional vs. non-traditional and accept that we are what we are by learning from our own experiences as well as from the past.

As expected, the informant's knowledge was directly related to the place that he/she learned about *limu*. While most informants were aware of different *limu* that grew outside of his/her harvesting areas, the majority of knowledge came from his/her harvesting grounds. Part of the reason why this is so is because the people I spoke with have a practical knowledge base. They know what they know by doing and most of them learned about *limu* from their elders when they were young. A trend that we may see grow as the world becomes a "smaller" place because of the media, higher education, and the world wide web, is that people's knowledge will become "homogenized." My knowledge about *limu* is the perfect example. I come out of this research knowing a heck of a lot about *limu* but it is from reading books, listening to tapes and videos, and interviewing people from many different places. I may know a lot, but my information is not distinctly tied to place

or practicality. This is not necessarily a bad thing but it is very acultural as Hawaiian culture goes because of the importance of tying things to place. Where the information comes from is just as important as the information itself.

There is a small industry developing in the way of *limu* cultivation. *Limu* farms in Kona and Moloka`i (Machado `ohana) are currently producing *limu* ogo for sale at markets on most, if not all, of the Hawaiian Islands. Additionally, the recent resurgence in fishpond restoration on the main islands (Hawai`i, Maui, Moloka`i, O`ahu, and Kaua`i) has sparked interest in the cultivation of *limu* within fishponds for food (both for fish and human consumption) and stabilization of the fishpond.

If the term cultivation is used loosely, it can also be applied to most *limu* gatherers who visit the same locations frequently to collect. These *limu* gatherers develop an intimate understanding of the locality, its conditions, and the particular *limu* that they collect. By harvesting properly (leaving the "roots" behind), occasionally weeding undesirable, encroaching *limu*, and in

one case, replanting roots in different locations (John Lind plants *limu kohu* roots that accidentally make it into his harvest), the practical *limu* harvester is, in fact, tending and cultivating his/her *limu*.

CHAPTER 5: CONCLUSION

Embarking on scientific research that aims to elucidate information from within my culture was very hard for me. There are still lingering feelings of resentment towards the whole process within myself. Before starting the research, I wrestled with the idea of intracultural research and, particularly, which methods would be acceptable to my culture. I wanted to learn about the names and uses of different *limu* in a casual, culturally appropriate setting so that I could perpetuate these traditions with my own family and to document this information for future generations. These goals did not always mesh nicely with some of my doubts and fears about the process.

There were a number of things about the scientific process that made this project uncomfortable. Informed consent, while extremely important and ethical, was very awkward for me personally, especially because I wanted to preserve an informal setting. Asking for verbal/written consent made me feel like there was something about this

experience to be suspicious of. I was also terrified of rejection. I think a person who is learning from a culture other than his/her own is better able to deal with rejection. I was afraid of being rejected by people within my own culture and any kind of lasting effects that it might have on the perception of me in the eyes of that informant, his/her family, and broader community. In a sense I did not want to be viewed primarily as a scientist trying to gather information rather than a Hawaiian wanting to learn about his own culture.

Something that bothered me that springs from my own personal culture, not necessarily Hawaiian or local culture is that I didn't want to be a burden to these people. While most of them seemed to enjoy sharing their *mana`o*, it nevertheless concerned me that I would be taking up too much of their time.

I also struggled with the idea of learning from multiple *kumu* or sources. Learning things like picking and eating *limu* were traditionally passed on in the natural process of young ones doing these things with their family.

Because I'm older and don't have family that can teach me about these things, and I wished to learn about *limu* names and uses from different areas, I had to sacrifice natural, cultural way of learning these things from relatively few, familial sources and learn from whoever was willing to share.

On top of all these other concerns, there was a pressure to collect enough data to fulfill the requirements of a Master's thesis within a certain time frame. Very few people really want to be a student forever but are proud of being life-long learners. This project is one for the life-long learner. While the information learned and presented thus far may fulfill the academic requirements, the work of learning, documenting, and perpetuating the use of *limu* throughout Hawai'i will never be complete.

I have learned a lot about myself through this research process. I think that people should be encouraged to learn and document information from our knowledgeable elders if it is something they are comfortable with. The wealth of information that slowly dies away as our *kupuna*

pass on, whether it be about *limu* or plants or place names or family *mo`olelo* should be recorded for the richness of our culture and to memorialize today, tomorrow's past.

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**Appendix A: Limu Database
Full Reference Key**

SOURCE	FULL REFERENCE
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Abbott 1996	Abbott, Isabella Aiona. 1996 Revised (1974). Limu an ethnobotanical study of some Hawaiian seaweeds. Lawai: Pacific Tropical Botanical Garden.
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Aiona	Aiona, William Thomas. Personal Interview. October 2001.
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Anamizu	Anamizu, Carol and Joy. Personal Interview. August 2001.
Andrews	Andrews, Lorrin. 1974 (First published in 1865). <i>A Dictionary of the Hawaiian Language, to which is appended an English-Hawaiian Vocabulary and a Chronological Table of Remarkable Events</i> . Rutland, Vermont: Charles E. Tuttle Company.
Bryan	Bryan, E. H. Jr. 1933. Hawaiian Nature Notes. Honolulu: Star-Bulletin Publishing Co., pp. 138 - 143.
Chamberlain	Chamberlain, J. E. 1881. Algae of the Hawaiian Islands. <i>Hawaiian Annual</i> (1881) 7: 32 - 33.
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Ewaliko	Ewaliko, Elizabeth. Ka Leo Hawai'i. University of Hawai'i at Mānoa: Moore Hall. Reel HV24.90A.
Garmon	Garmon, 'Ulu. Personal Interview. October 2001.
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Haanio	Haanio, Mary Ahio. 1960. Mary Kawena Pukui Interview. Bernice Pauahi Bishop Museum Library. HAW106.2.2.
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Henriques-Peabody	Henriques-Peabody Collection. Names of Hawaiian birds, shore fauna, and seaweeds. Honolulu: Bernice Pauahi Bishop Museum Archives. MS HENI, p. 863.
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Ili	Sarah 'Ili - 'Aha Mānaleo (1998: Hawai'i). Limu Conference. Videotape 15429 (Sinclair AV Center).
Kaalakea	Kaalakea, Kawika. Ka Leo Hawai'i. University of Hawai'i at Mānoa: Moore Hall. Reel HV24.178A.
Kaanana	Kaanana, Edward. Personal Interview. March 2001.
Kaina	Kaina, Joseph "Blondie". Personal Interview (Wilfred Kala, John Kiambao, Masu Hashimoto, Milton Diego, and others included). January 2001.
Kapahulehua	Kapahulehua, Kawika. Personal Interview. May 2001.
Kauahipaula	Elizabeth Kauahipaula - 'Aha Mānaleo (1998: Hawai'i). Limu Conference. Videotape 15429 (Sinclair AV Center).
Keohokalole	Emma Keohokalole - 'Aha Mānaleo (1998: Hawai'i). Limu Conference. Videotape 15429 (Sinclair AV Center).
Lind	Lind, John. Personal Interview. May 2001.
MacCaughey 1916	MacCaughey, Vaughan. 1916. The seaweeds of Hawaii. American Journal of Botany (1916) 8: 474-479.
MacCaughey 1917	MacCaughey, Vaughan. 1917. The algae of the Hawai'ian Archipelago. Hawaiian Annual (1918) 44: 129-155.
Magruder	Magruder, William H. and Jeffrey W. Hunt. 1979. Seaweeds of Hawaii a photographic identification guide. Honolulu: The Oriental Publishing Company.
Miller	Miller, Harvey Alfred. 1951. Limu: the ethnic uses of Hawaiian algae. Honolulu: Bernice Pauahi Bishop Museum Archives. QK Bot. Pam. 2701.
Neal	Neal, Mary C. 1930. Hawaiian marine algae. Honolulu: Bernice Pauahi Bishop Museum Bulletin 67.
Poepoe	Mac Poepoe - The Molokai Experience. KHET-TV. 1996. Videotape 15591 (Sinclair AV Center).
Pukui	Pukui, Mary Kawena, and Samuel H. Elbert. 1986. Hawaiian Dictionary. Honolulu: University of Hawaii Press.
Reed	Reed, Minnie. 1907. The economic seaweeds of Hawaii and their food value. Ann. Report Hawaii Agricultural Experiment Station 1906: 61-88.

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Full Reference Key**

Sanborn	Winifred Kalei Saffery Sanborn - Pukui, Mary Kawena. 1960. Interview with Winifred Sanbor, Alice Aki, I. Ashdown. Bernice Pauahi Bishop Museum Audiotape Archives. A HAW 84.6.1.
Serrano	Hannah Serrano - 'Aha Mānaleo (1998: Hawai'i). Limu Conference. Videotape 15429 (Sinclair AV Center).
Setchell	Setchell, William Albert. 1905. Limu. University of California Publications: Berkeley The University Press. 2 (3): 91-113.
Simpson	Simpson, Flora L. 1944. Memo to Seaweed Eaters. Paradise of the Pacific 56 (8): 5-6.
Tilden	Tilden, Joseph E. 1905. Algae collecting in the Hawaiian Islands. The Hawaiian Annual (1905)?: 131-145.
Wong	Wong, Ipo. Personal Interview. May 2001.

LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
aski	Henriques-Pearbody	863					
aiakula	Sorichall	96		pe epe'e (Maui)			<i>Codium Muellieri</i> Kuetzing
aiakula	Tilden	133	Used, uncooked, as food.				<i>Codium adhaerens</i> (Cabr.) Ag. and <i>Codium tomentosum</i> (Huds.) Stackh.
'a'ala'ula	Abbott 1996	19	Some people reserve this name for <i>Codium redline</i> but most use names interchangeably.				<i>Codium redline</i> Silva
'A'ALA-U'ALA	Doo	1	(Hawai'i)				<i>Codium Muellieri</i> Kuetzing, <i>C. tomentosum</i> (Huds.) Stackh., <i>C. adhaerens</i> (Cabr.) Ag.
'a'ala'ula	Magruder	25					<i>Codium redline</i> Silva
'i'ia'ala'ula	Pukui	3	Velvety-green, succulent-appearing seaweeds, one of several species of <i>Codium</i> , yields a red liquid when placed in a container overnight with brine, after chopping or pounding. Both the liquid and the seaweeds are well liked, being eaten plain or with other food. (K.L. line 47) 'A'ala'ula is the common name on Kauai and Maui, wāwae iole elsewhere.	wāwae iole			<i>Codium</i>
'a'ala'ula	Kauaiapaua	Video: AM	Pihahalahe. Nui ka ulu'ulu, kolu'ipil.				
'a'ala'ula, limu	MacCaughy 1917	141	Plentiful in shallow water along the reefs.				<i>Codium adhaerens</i> (Cabr.) Agardh, <i>Codium tomentosum</i> (Huds.) Stackh.
'a'ala'ula, limu	MacCaughy 1917	142		limu wawae-iole, limu wawae-moa			<i>Codium Muellieri</i> Kuetzing
'a'ala'ula, limu	Neal						<i>Codium tomentosum</i> (Huds.) Stackh.
'a'ala'ula, limu	Reed	86	Grow far out on the coral reefs or on exposed rocks in the surf. Dropped into hot soup or gravy as it is about to be served. Sometimes are ripened by soaking in fresh water. Often pounded very fine and mixed with pounded salted squid.				<i>Codium adhaerens</i> (Cabr.) Agardh, <i>Codium tomentosum</i> (Huds.) Stackh.
'a'ala'ula, limu	Reed	86	Limu wawae-iole or limu wawae-moa are found in use in some places on Hawaii, not common. Grow far out on the coral reefs or on exposed rocks in the surf. Dropped into hot soup or gravy as it is about to be served. Sometimes are ripened by soaking in fresh water.	limu wawae-iole, limu wawae-moa			<i>Codium Muellieri</i> Kuetzing
'a'ali	Henriques-Pearbody	863					
'ai-a-ka-houu	Pukui	10	Same as hulu mauu, a seaweed. Lit., food of the turtle.	hulu mauu			

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
aka-akon	Bryan						<i>Ectocarpus</i> sp.
'AKA'AKO'A	Doty	1					<i>Ectocarpus indicus</i> Sonder
'ika'ako'a	Pukui	12	A variety of seaweed.				
aka-akoa, limu	MacCaughy 1917	146	Plentiful along the coasts, in shallow water. Used by them (natives) for food.	limu hulu-ilio			<i>Ectocarpus Indicus</i> Sonder
akaakoa, limu	Neal						<i>Ectocarpus</i>
akaakoa, limu	Reed	86		limu huluilio			<i>Ectocarpus indicus?</i> Sonder, <i>Ectocarpus</i> sp.?
'akala	Pukui	13	Same as kala, a seaweed.	kala		Two endemic raspberries <i>Rubus</i> spp.	
aki-aki	Bryan						<i>Amygdalia</i> sp.1.
akiaki	Setchell	93, 96	Commonly eaten on Hawai'i, eaten with opihi and called Koelele (Kawaihae)	koelele, ekahakaha (Maui)			<i>Amygdalia Polyides</i> Aresch., <i>A. concinna</i> J. Agardh, <i>A. Gigartinoidea</i> J. Agardh
'AKI'AKI	Doty	1	(Hawai'i)		koelele, ekahakaha (MacCaughy)		<i>Amygdalia concinna</i> J. Ag.; <i>Amygdalia polyides</i> ([form of <i>Amygdalia concinna</i> J. Ag.?] fide Reed)
'aki'aki	Magruder	57					<i>Amygdalia concinna</i> J. Ag.
'aki'aki	Pukui	14	A kind of coarse red seaweed (<i>Amygdalia concinna</i>) which because of its toughness must be eaten in little bites, a good source of carageenin, a colloid. (KI line 41.) Called 'eleau on Maui.	'eleau		seashore rush grass (<i>Sporobolus virginicus</i>)	<i>Amygdalia concinna</i> J. Ag.
'aki'aki	Huanio	Audio	Ka 'ai kela a ka bonu. 'A'ole 'ai 'ia naa mua. Lohe 'o ia 'ai ka Pilipino. Kupa a mo' a a palupalu. 'A'ole kēlā he 'ai na ka Hawai'i.				
'aki'aki	Howard	Interview	She doesn't eat this limu but it grows all over the rocks in Puna.				<i>Amygdalia concinna</i> J. Ag.
aki-aki, limu	MacCaughy 1917	150	This seaweed is relished by the natives and is commonly sold in the markets	limu eleau			<i>Amygdalia concinna</i> J. Ag.
akiaki, limu	Reed	86	limu eleau on Maui. Grow quite near the tide line along shore, but on exposed black lava rocks in rough water. Occasionally cooked in imu when there was famine or war and taro and sweet potatoes were scarce. Cooked with boiled meats long enough for the gelatin to be softened or dissolved. Substituted for limu huna when cooked with squid or octopus.	limu eleau (Maui only)			<i>Amygdalia concinna</i> J. Ag.

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
akiaki, limu	Chamberlain	32					
'aki'aki, limu	Abbott 1996	29	Baked with chicken or fish in imu.	'elea and awikiwiki (Mau), limu ko'ele'ele (but name also used for other species like <i>Gymnogongrus</i>).			<i>Aurelia concinna</i> J. Ag.
'aki'aki, limu	Abbott 1996	12	Gelatinizes on heating, used in stews or in imu.				
'aki'aki, limu	Garmon	Interview	Used in cursing.				
AKIULA	Doty	1	(Chamberlain)				
'AKO'AKO'A	Doty	1	Coral or all jointed corals				
ako'ako'a	Setchell	97	Coral, horned coral in particular, and one or all jointed coralline limu				
AKUILA	Doty	1					<i>Chytocladia rigens</i> (Ag.) J. Ag.
akuila	Pukui	16	Same as KIHĒ, a red seaweed.	kihe			<i>Chytocladia</i> sp.
akuila, limu	Reed	86		limu kihe			<i>Chytocladia rigens?</i> (Ag.) J. Ag.
akuila, limu	Chamberlain	32					
akuila, limu	MacCaughy 1917	152	An edible species.	limu kihe			<i>Chytocladia rigens</i> (Ag.) J. Ag.
ALAALAULA	Doty	1					<i>Codium Muellieri</i> Kuetzing
alaaula	Henriques-Peabody	863					
alaaula	Setchell	97					Perhaps <i>Codium</i> sp.
alaaula, limu	Chamberlain	32	Chamberlain's list includes Andrew's Dictionary limu names and names from other sources				
ALANI	Doty	1	LIMU MAKE? (Setchell)				<i>Dicyota</i> spp.; <i>D. acutiloba distorta</i> J. Agardh; <i>D. dichotoma</i> (Huds.) Lamour.

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
alani	Magruder	41, 42, 45					<i>Dictyota crinita</i> J. Agardh, <i>D. bartayresii</i> , <i>D. sandwicensis</i> Sond.-Kuetz.
alani	Setchell	97	Same as limu make (???)			Pelea plant	
alanu	Pukui	18	Brown seaweeds (<i>Dictyota</i> spp.), regularly divided into narrow segments. They are so bitter that they will taint other seaweeds put with them and can be eaten but little and by some are considered poisonous. Medical kahunas used them in small quantities to treat asthma. This name is sometimes qualified by the terms kai and 'ula. Also maka and false lipoa. Cf. kōālani		maka and false lipoa	An O'ahu tree (<i>Pelea sandwicensis</i> or <i>P. oahuensis</i>)	<i>Dictyota</i> spp.
alanu	Henriques-Peabody	863					
alani, limu	MacCaughy 1917	148	Seldom used for food by the natives, as they are bitter.				<i>Dictyota acutiloba</i> J. Agardh, <i>D. sandwicensis</i> Sond.-Kuetz, <i>D. spinulosa</i> Harv., <i>D. dichotoma</i> (Huds.) Lamx.
alani, limu	Chamberlain	32					
alani, limu	Reed	86	Sometimes called false limu lipos, which it resembles slightly. It is eaten but seldom, as it is bitter	false lipoa			<i>Dictyota acutilob distorta</i> , <i>Dictyota dichotoma</i> (Huds.) Lamx.
alani, limu	Garnon	Interview	One type is edible and the other is poisonous (and used for stunning fish). Both resemble lipoa but are softer.				
alaula	Setchell	97	Probably aalaula	aalaula			<i>Codium Muielleri</i> Kuetzing
alaula, limu	Neal						<i>Codium tomentosum</i> (Huds.) Stackh.
alolo, limu	Pukui	207	A limu, <i>Potamogeton pectinatus</i> (pronunciation not certain). Ni'ihau				<i>Potamogeton pectinatus</i>
'ānapenapa	Pukui	24	Red seaweeds (<i>Gelidium</i> spp.); small, stiff, branching, edible plants. Also limu loloa.	limu loloa		Hawaiian soap plant (<i>Colubraria asiatica</i>)	<i>Gelidium</i> spp.
'āpe'epe'e	Pukui	28	Rare var. of lipoe'epe'e, a seaweed.				
AUPUPU	Doty	1					<i>Griffithsia ovalis</i> Harv.?
aupupu	Setchell	97					
aupupu	Henriques-Peabody	863					

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
aupūpū	Pakui	33	Same as mo'opuna-a-ka-lipoa, a common seaweed.	mo'opuna-a-ka-lipoa, mo'opuna		same as makaloa, a shellfish, general name for shellfish with long sharp edges (<i>Thais intermedia</i> , <i>Drupa morum</i>) Also aupūpū, pūpū 'awa.	<i>Griffithsia</i> sp.
au-pupu, limu	MacCaughy 1917	154		limu moo-puna, limu ka-lipoa			<i>Griffithsia ovalis</i> Harv.?
aupupu, limu	Chamberlain	32					
aupupu, limu	Reed	87		limu moopuna, limu ka-lipoa			<i>Griffithsia</i> sp.?
awaawa	Henriques-Peabody	863					
awikiwiki	Henriques-Peabody	863					
'AWIKI-WIKI	Doty	1					<i>Gymnogongrus</i> ; <i>G. vermicularis americana</i> J. Ag.; <i>G. disciplinalis</i> (Bory) J. Ag.
'āwikiwiki	Pukui	35	Same as kō'ele'ele.	kō'ele'ele		vine, Canavalia	<i>Gymnogongrus</i>
awiki-wiki, limu	MacCaughy 1917	150		limu ua-ua-loli, limu ekaha-kaha, limu ko-ele-ele, limu nei			<i>Gymnogongrus vermicularis</i> , <i>G. americana</i> , <i>G. disciplinalis</i> (Bory) J. Ag.
awikiwiki, limu	Reed	87	Used in love-making charms in ancient days.	limu uuaololi, limu ekahakaha, limu koelele or koele, limu nei			<i>Gymnogongrus vermicularis americana</i> J. Ag., <i>Gymnogongrus disciplinalis</i> J. Ag.
chau	Setchell	97					
chau, limu	Chamberlain	32					
ekaha	Setchell	97				parasitical plant and fern-like plant	<i>Halimeda</i> spp.
'EKAHA	Doty	1					<i>Halimeda</i>
EKAHA-EKAHA	Doty	2					<i>Gymnogongrus vermicularis americana</i> J. Agardh, <i>G. disciplinalis</i> (Bory) J. Agardh
ekahakaha, limu	Reed	87		limu uuaololi, limu koelele or koele, limu awikiwiki, limu nei			<i>Gymnogongrus vermicularis americana</i> J. Ag., <i>Gymnogongrus disciplinalis</i> J. Ag.
Ekahakaha	Abbott 1947	204					<i>Gelidium</i>

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
ekahakaha	Setchell	98	Maui name for Hawai'i's akiaki and koelele				
'EKAHAKAHA	Doty	2	(Maui)		akiaki (Hawai'i); koelele (Hawai'i; ex Chamberlain fide Setchell)		<i>Gelidium filicinum</i> Bory; <i>G. pusillum</i> ; <i>?Ahnfeldtia concinna</i> J. Ag.; <i>Gelidium</i> ; <i>Gymnogongrus</i>
'ekahakaha	Pukui	39	Var. name for limu loloa and limu uuaa loli.	limu loloa, limu uuaa loli	limu loloa, limu uuaa loli	juvenile or small birds nest fern ('ekaha)	
ekaha-kaha, limu	MacCaughey 1917	150		limu ua-ua-loli, limu ko-ele-ele, limu awiki-wiki, limu nei			<i>Gymnogongrus vermicularis</i> ; <i>G. americana</i> ; <i>G. disciplinaris</i> (Bory) J. Ag.
ekaha-kaha, limu	MacCaughey 1917	150		limu loloa			<i>Gelidium attenuatum</i> , <i>G. cornutum</i> , <i>G. filicinum</i> Bory, <i>G. intricatum</i> (J. Agardh) Kuetz., <i>G. latifolium</i> Born., <i>G. cartilagineum</i> (L.) Gaill., <i>G. pusillum</i> (Stackh.) Le Tol.
ekahakaha, limu	Reed	87	Sometimes pounded and mixed with limpets and sometimes cooked with chili peppers and salt.	limu loloa			<i>Gelidium filicinum</i> ? Bory
ekahakaha, limu	Neal						<i>Gelidium</i>
ekahakaha, limu	Chamberlain	32					
eleau	Setchell	98	Found at low tide just above the water. One to two feet long, and is used as a substitute for banana leaves when cooking pig in "native fashion." Only the parts of limu that are smeared on the pig are eaten.				
eleau, limu	Reed	86		limu akiaki			<i>Ahnfeldtia concinna</i> J. Agardh
eleau, limu	MacCaughey 1917	150		limu aki-aki			<i>Ahnfeldtia concinna</i> J. Agardh
elecle	Setchell	98	This limu is always prefixed with the term "limu." (Many other limu are referred to by using only the special designation). Fresh water type lasts two days, salt water lasts a week. Slippery and fragrant, can be smelled from a distance (Puaikoolau, Moloka'i).				
elecle	Simpson						
ele-ele, limu	MacCaughey 1917	139	Easily gathered, considered edible by the natives. Among the most abundant, most popular, and most widely used of all the edible algae.				<i>Enteromorpha flexuosa</i> (Wulfen) J. Agardh <i>E. Hoparkii</i> J. Agardh., <i>E. intestinalis</i> (Linnaeus) Link. <i>E. linza</i> (Linnaeus) J. Agardh <i>E. plumosa</i> (Muller) J. Agardh <i>E. prolifera</i> (Muller) J. Agardh <i>E. tubulosa</i> Kuetz., <i>E. compressa</i> (L.) Grev.

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
ele-ele, limu	MacCaughey 1916	476	"the black or dark limu"				<i>Enteromorpha flexuosa</i> (Wulfen) J. Agardh
elede, limu	Neal						<i>Enteromorpha</i>
eleele, limu	Reed	36, 87	Grow near the shore. Must always be floated or dipped out of the water into pails because it always grows at the mouth of streams in the quiet brackish water, so is full of silt or sand. Dropped into hot soup or gravy as it is about to be served. Soaked and washed in fresh water, slightly salted, and served uncooked with poi and fish or meats. Sometimes it is ripened by soaking for twenty-four hours or more until it becomes yellowish, slimy, and developed a rank odor. Dried and put on boils or sometimes used fresh and moist to poultice boils. Pounded with limu palawai and salt and tied on cuts and bruises.	limu pipilani			<i>Enteromorpha flexuosa</i> (Wulfen) J. Agardh <i>E. Hopkirkii</i> J. Agardh, <i>E. intestinalis</i> (Linnaeus) Link <i>E. linza</i> (Linnaeus) J. Agardh <i>E. plumosa</i> (Muller) J. Agardh <i>E. prolifera</i> (Muller) J. Agardh, <i>E. subulosa</i> Kuetz., <i>E. compressa</i> (L.) Grev.
elele, limu	Müller						<i>Enteromorpha</i>
'ELE-'ELE	Doty	2					<i>Enteromorpha compressa</i> (L.) Grev.; <i>E. intestinalis</i> (Linnaeus) Link
'ELEAU	Doty	2					<i>Amygdalia concinna</i> J. Ag.
'eleau	Pukui	40	Perhaps same as 'aki'aki, a seaweed. Maui.	'aki'aki			<i>Amygdalia concinna</i> J. Ag.
'ele'ele	Ah Quin	Interview	Mullet eat the young 'ele'ele. Awa kalannoho eat the long limu. Lanikaes's kau is July - August.				
'ele'ele	Magruder	27					<i>Enteromorpha</i> sp.
'ele'ele	Pukui	40	Long, filamentous, green, edible seaweeds (<i>Enteromorpha prolifera</i>). Some kinds are among the most popular in Hawaii, being eaten raw as condiments at feasts. Called pipilani on Maui.	pipilani (Maui)		cooking banana variety, taro, sugar cane, sweet potato	<i>Enteromorpha prolifera</i> (Muller) J. Agardh
'ele'ele, limu	Kaina	Interview	Also limu lauoho.	limu lauoho			
'ele'ele, limu	Kaalakea	Audio	If there is fresh water, get. If there is no fresh water, no limu 'ele'ele.				
'ele'ele, limu	Abbott 1996	13, 17	Cleaned in salt water, then in fresh water and soaked overnight. Add salt.	hulu Tio			<i>Enteromorpha prolifera</i> (Muller) J. Agardh <i>E. app.</i> except coarse large ones.

LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
'ele'ele, limu	Ewaliko	Audio	<p>\$34/quat, limu 'ele'ele, ho'okomo i lolo o ka stew meat. Nā kau o ka limu, 'eha manawa o ka makahiki, puka mai kēia limu. When us, wash all the dirt, pau ka lepo, a laila ahi mai ka limu, ma ma'e. Hiki me ka limu a ho'oma'ema'e.</p> <p>Luli ka hana 'ana. Aia a mako, 'ono. 'A'ole 'ala ka limu i kēia mau lā, nui nī me o ka kahuwai e holo nei. I pule ka waiho 'ana i loko o ka 'ōmole ma ka pahu iku. Have to freeze it after. Uluhi, o ia ka poiola. Pua mai ma hope (hikeakea mai).</p> <p>'O'i ahi ka uluhi ma mua o ka pua. 'O ka mea hou ka mea pokopoko. Ma Kahala Hilton.</p>				
'ele'ele, limu	Kanahikapula	Video: 'AM	Ko kau ka limu 'ele'ele, loloa.				
'ele'ele, limu	Garmon	Interview	This limu likes to grow where there is some flow in the water (fountain). You collect it by pinching a little at a time so it doesn't get sandy.				
'ele'ele, limu	Aiona	Interview	My dad told me about his mother picking 'ele'ele and that when they want to pick it, they needed to do it VERY carefully so no sand would be mixed in with it. She would give them lickings if it were sandy.				
'ele'ele, limu	Howard	Interview	She picks up this limu at Punalu'u Beach, growing on the rocks and in the sand at the intertidal area (where the freshwater springs are).				<i>Enteromorpha prolifera</i> (Muller) J. Agardh
eledele maoli	Henriques-Pesbody	863					
eleole	Henriques-Pesbody	863					
elula	Henriques-Pesbody	863					
eneue limu	Diego	Interview	Red with leaves, skinny on bottom and branching on top, smooth. Also called turtle limu.				
General Limu	Hannio	Audio	<p>'A'ole nui loa i kēia manawa. Kāpulu kahakahi, lepo. Ma mua, kupa kahakahi, 'a'ole kāpulu 'ia. Ma mua he wahi no ka 'au'au, 'a'ole 'au'au ma nā 'ano wahi like 'ole.</p>				
General Limu	Ellis	Video: 'AM	Remembers eating 'ele'ele, lipoa, lipa'epe'e, limu wawae'ole.				
General Limu		Video: 'AM	A list is prepared of limu: limu kōhu, limu lipoa, limu 'ele'ele, limu manatea, limu kala, limu lipa'epe'e, limu wawae'ole, limu huluhuhawana, limu 'opili.				
General Limu	Kaunana	Video: 'AM	'Ako i ka limu.				
General Limu	Serrano	Video: 'AM	Remembers eating kōhu, 'ele'ele, manatea, lipoa, lipa'epe'e. If you hiki the limu it will be gone. 'ohi limu is the correct way. Lipoa is eaten with fish, lipa'epe'e is salted and eaten with poi or 'ōpeli. These days there isn't limu like before.				

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
General Limu	Kaina	Interview	Maka'ala is the main spot for limu in Hāna. Hāna does not have certain limu like Lahaina side like huluhuluwaena, ogo, etc. Those types of limu like dirty water, where Hāna has clean water. Lots of rain makes the limu grow long. The 'ōpū of the enenue has limu that you can rinse and eat with poke.				
General Limu	Keohokalole	Video: 'AM	'Ōhi limu ke ma'ema'e ke kai. Kai nui, nui ka lepo. Nui ka limu ma Kāne'ohē. Remembers 'ele'ele and huluhuluwaena.				
General limu	Ah Quin	Interview	Manawea, waiwai'ole, li peepoe, kohu, lipoa, hulu hulu waina, maneo neo, owaka waka, kala, opihī (2 types), node, ribbon. Kau - season thereof. Kihei - Garden of Eden. Turtle feed from July to September at Kāwailoa, O'ahu. Pollution and overharvesting changed the limu. His kumu was mostly Helen Ho'opi'i Kenolio - "Limu Lady of Maui" - Kihei. Foreign limu is taking over the reefs. When gutting fish, you can observe the types of limu that fish eat.				
General limu	Kaalahea	Audio	Kopekope i ka limu a hana po'opo'o. 'Ōko'a ka limu i kēia manawa.				
HANA	Doty	2					<i>Hypnea armata</i> (Mert.) J. Agardh
hana, limu	MacCaughy 1917	151	Among the most commonly eaten of the Hawaiian seaweeds. Especially relished when boiled with octopus.				<i>Hypnea armata</i> (Mert.) J. Agardh
HA'ULA	Doty	2	(very rare, Maui)				<i>Nitophyllum?</i>
hā'ula	Pukui	61	See limu hā'ula.		limu hā'ula		
haua, limu	Reed	38	Very rare, only one small specimen obtained from a native on Maui.				<i>Nitophyllum?</i>
hā'ula, limu	Pukui	207	a red seaweed (<i>Marietia fragilis</i>).				<i>Marietia fragilis</i> Harvey
hā'ulelani	Pukui	61	A fresh-water alga found in taro patches.				
hauelani, limu	Reed	67	Found in the cool, swift mountain streams or pools.				
HAWANE	Doty	2					<i>Polysiphonia mollis</i> Hooker et Harvey ex Harvey 1847. <i>Streblactidia?</i>
hāwane	Pukui	62	A small, fine, red seaweed (<i>Polysiphonia</i> spp.), consisting of branching filaments forming dense tufts.			Nut of the loulū, considered delicious to eat. Also the tree itself.	<i>Polysiphonia</i> spp.
hawane, limu	Reed	38					<i>Streblactidia?</i>

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
hawane, limu	Reed	88		limu pualu			<i>Polysiphonia mollis</i> Hooker et Harvey ex Harvey 1847
hawane, limu	MacCaughy 1917	154		limu pu-shu			<i>Polysiphonia mollis</i> Hooker et Harvey ex Harvey 1847
hinakea	Haunio	Audio	Limu kama'iina o Kona. Ulu palaha ma ka pōhaku pāhoehoe. Kopekope me ka pahi, ku'i i ka hale. Limu kai kēlā, 'a'ole 'ai pa'a like me ka līpe'epe'e... 'A'ala'ono.				
hinaula	Setchell	98					
hinaula	Haunio	Audio	Limu kama'iina o Kona. Ulu palaha ma ka pōhaku pāhoehoe. Kopekope me ka pahi, ku'i i ka hale. Limu kai kēlā, 'a'ole 'ai pa'a like me ka līpe'epe'e... 'A'ala'ono.				
hinaula	Henriques-Penbody	863					
HINA'ULA	Doty	2	(Chamberlain)				
hina'ula	Pukui	71	A kind of seaweed.				
hinaula, limu	Chamberlain	32					
holōwai, limu	Pukui	207	A fresh water moss.				
HOLOMOKU	Doty	2	(Chamberlain)				
holomoku	Setchell	99					
holomoku, limu	Chamberlain	32					
HONA	Doty	2					<i>Hypnea nidifica</i> J. Agardh
hona	Setchell	99		limu huna			<i>Hypnea nidifica</i> J. Agardh
honū (limu honu), limu	Abbott 1996	11	Limu kala is known to be eaten by turtles, probably accounting for the name limu honū.	limu kala			<i>Sargassum</i> spp.
hoonunu	Setchell	99					<i>Laurencia obtusa</i> var. <i>racemosa</i> (Huds.) Lamx.

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
HO'ONUNU	Doty	2	(Puna, Hawai'i)				<i>Laurencia obtusa</i> var. <i>racemosa</i> (Huds.) Lamx.
ho'onunu	Pukui	273	A seaweed (<i>Laurencia obtusa</i> var. <i>racemosa</i>). Cf. Ilpe'e.				<i>Laurencia obtusa</i> var. <i>racemosa</i> (Huds.) Lamx.
huhuhukai	Setchell	99					
hu'ahu'a kai	Pukui	84	A variety of seaweed.				
HU'AHU'AKAI	Doty	2	sponge (ex Chamberlain fide Setchell)				
huhuhukai, limu	Chamberlain	32					
hikai, hūwai	Pukui	84	A kind of seaweed (<i>Codium</i>).			A shellfish of the hūfwai family	<i>Codium</i>
HULU	Doty	2					<i>Ceramium clavulatum</i> Agardh; <i>Centroceras clavulatum</i> (C. Agardh) Montagne
hulu	Pukui	90	Same as hulu 'lio, nahaweie, pūhuluhulu, a seaweed.	hulu 'lio, nahaweie, pūhuluhulu			
hulu, limu	MacCaughy 1917	154		limu hulu-lio, limu hulu wawae- iole			<i>Ceramium clavulatum</i> Agardh
hulu, limu	Reed	86		limu hulu'io, limu hulu wawae- iole			<i>Centroceras clavulatum</i> (C. Agardh) Montagne
huluhulu	Pukui	90	Kinds of seaweeds and mosses.				
huluhulu-a-'iole	Pukui	90	Same as hulu 'iole.	hulu 'iole			
huluhulu waena	Pukui	90	An irregularly branching, dark-red seaweed (<i>Grateloupia filicina</i>) with many narrow segments. It is commonly eaten and is sold in some markets. Also pakele-wa'a.	pakele-a-wa'a			
HULUHULUWAENA	Doty	2	(all but Kona'i)				<i>Grateloupia filicina</i> (Lamouroux) C. Agardh
Huluhuluwaena	Abbott 1947	206	(Hawaii)				<i>Grateloupia</i>
huluhuluwaena	Magruder	73					<i>Grateloupia filicina</i> (Lamouroux) C. Agardh

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
huluhuluwaena	AH Quin	Interview	With ake. With squid.				
huluhuluwaena	Kaalea	Audio	Mixed with ake.				
huluhuluwaena	Ewaliko	Audio	Ma Kahala Hilton. Ulu pū me ka limu utuuli. Ho'ohui 'ia me ke ake. 1 kālani huluhuluwaena, 5 kālani ake. 'Ula' ula kēia limu.				
huluhuluwaena	Kana	Interview	Mixed with ake.				
huluhuluwaena	Setchell	93, 95, 99	Hair-like limu. Eaten with opihī in Hilo.	Pakaleawaa (Maui)			<i>Grateloupia filicina</i> (Lamouroux) C. Agardh
huluhuluwaena	Garmon	Interview	Grows on coral. Her grandmother was the "ake person" of her time - she was famous for making the huluhuluwaena with ake (raw beef liver) for everyone. Then her mother (Aunt Edith) became the "ake person".				
hulu-hulu-waena, limu	MacCaughy 1917	154	This name is used on Hawai'i. Both names are used on the intermediate islands.	limu paka-cle-awa'a			<i>Grateloupia filicina</i> (Lamouroux) C. Agardh
huluhuluwaena, limu	Neal						<i>Grateloupia filicina</i> (Lamouroux) C. Agardh
huluhuluwaena, limu	Abbott 1996	9, 13, 25	Cleaned in salt water, then in fresh water and chopped. Add salt. Transplanted from Honokowai, Lahaina Maui (E. Williamson) or by Mrs. Sam Nowlin from Moloka'i to Waikiki for Lili'uokalani. Brought to Waikiki for Lili'u from either Honokowai, Maui or Moloka'i.	pakeleawa'a (Maui and Moloka'i), ake limu (most common used with ake).			<i>Grateloupia filicina</i> (Lamouroux) C. Agardh
huluhuluwaena, limu	Roud	87	This name is in very general use on Hawaii and Maui, but both names are common on Oahu. Grow near the shore.	limu pakaleawaa			<i>Grateloupia filicina</i> (Lamouroux) C. Agardh
huluhuluwaena, limu	Howard	Interview	Picks up this limu at Punahū Beach (Hawai'i) growing in the shallow area in the sand (where there is fresh water springs under ground).			Gra	<i>Grateloupia filicina</i> (Lamouroux) C. Agardh
huluhulu wakine	Henriques-Peabody	863					
hulu 'i'i	Henriques-Peabody	863					
hulu 'i'i	Pukui	90	A kind of seaweed.				
hulu-ilio	Bryan						<i>Cladophora</i>
hulu-ilio	Bryan						<i>Ectocarpus</i>

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
HULU-ILIO	Doy	2					<i>Cladophora nitida</i> Kuetz. or <i>Chaetomorpha antennina</i> (Bory) Kütz. <i>Jania rubens</i> ; <i>Stigeoclonium amoenum</i> Kuetz.; <i>Centroceras clavulatum</i> (C. Agardh) Montagne; <i>Ectocarpus</i> spp.; <i>Ceramium clavulatum</i> Agardh; <i>Ectocarpus indicus</i> Sonder
hulu ilio	Henriques-Pearbody	863					
hulu 'ilio	Pukui	90	A fine, unbranched, green seaweed <i>Chaetomorpha antennina</i>), looking much like <i>Cladophora nitida</i> . Also 'iliu, nahawele.		Also 'ilio, nahawele		<i>Chaetomorpha antennina</i> (Bory) Kütz.
hulu 'ilio	Pukui	90	A fine, nonedible, brown seaweed <i>Sphacelaria tribuloides</i>), densely tufted, shorter and darker brown than <i>Ectocarpus</i>				<i>Sphacelaria tribuloides</i>
hulu 'ilio	Pukui	90	Some kinds of <i>Polysiphonia</i> seaweeds				<i>Polysiphonia</i>
hulu 'ilio	Pukui	90	A fine, feathery, green, fresh-water alga <i>Stigeoclonium amoenum</i>), found in streams and ditches; said to be edible				<i>Stigeoclonium amoenum</i> Kuetz.
hulu 'ilio	Pukui	90	A fine, red seaweed <i>Centroceras clavulatum</i>), forming short, dense, regularly branching tufts, with tiny forked tips; not edible. Also hulu, pūhuluhulu, wāwae'iole. Lit., dog fur		Also hulu, pūhuluhulu, wāwae'iole		<i>Centroceras clavulatum</i> (C. Agardh) Montagne
hulu 'ilio	Pukui	90	Fine, branching, edible brown seaweeds <i>Ectocarpus</i> spp.), forming short, olive-brown clumps				<i>Ectocarpus</i> spp.
hulu 'ilio	Pukui	90	A fine, branching, green seaweed <i>Cladophora nitida</i>), forming flexible, long, bright-green tufts; said to be edible				<i>Cladophora nitida</i> Kuetz.
hulu'ilio	Sescheil	99					<i>Jania rubens</i>
hulu-ilio, limu	MacCaughey 1917	141	This and several other species are used locally by the natives for food, chiefly on Maui and Hawaii.	limu ilio, limu manu			<i>Cladophora antennina</i> (Bory) Kuetz.
hulu-ilio, limu	MacCaughey 1917	141	Sometimes used for food.				<i>Cladophora nitida</i> Kuetz.
hulu-ilio, limu	MacCaughey 1917	146		limu aka-akoa			<i>Ectocarpus indicus</i> Sonder
hulu-ilio, limu	MacCaughey 1917	139	Grows in brackish ponds by the sea; eaten by only a few natives, a cosmopolitan of species with many varieties.				<i>Stigeoclonium amoenum</i> Kuetz.
hulu-ilio, limu	MacCaughey 1917	154		limu hulu, limu hulu wawae-iole			<i>Ceramium clavulatum</i> Agardh
hulu'ilio	Magruder	45					<i>Giffordia brevipartita</i>

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
hulu'ilio	Carmon	Interview	This limu is soft like wool (recognized from picture in Magruder book).				
hulu'ilio, limu	Neal						<i>Ectocarpus</i>
hulu'ilio, limu	Reed	86	Not widely used, only local on several islands, chiefly on Hawaii and Maui, and this name is applied to several species slightly resembling each other. It means dog's hair. Grow near the shore.	limu hulu, limu hulu wawae-iole			<i>Centroceras clavulatum</i> (C. Agardh) Montagne
hulu'ilio, limu	Reed	86	Grow near the shore.	limu ilio, limu manu			<i>Chaetomorpha antennina</i> (Bory) Kützting
hulu'ilio, limu	Reed	86	Grow near the shore.	limu akaakoa			<i>Ectocarpus indicus?</i> Sonder, <i>Ectocarpus</i> sp.?
hulu'ilio, limu	Reed	88	This grows in brackish water pools by the sea and is eaten by only a few Hawaiians. Grow near the shore.				<i>Stigeoclonium</i> sp.?
hulu'ilio, limu	Reed	86					<i>Cladophora nitida</i> Kuetz.
hulu'ilio, limu	Chamberlain	32					
hulu mana	Pukui	90	Green seaweeds (<i>Caulerpa</i> spp.), growing like land plants, with roots, prostrate stems, and leaflike divided fronds; not edible. Also 'ai-a-ka-honu, hulu moa, limoa.		'ai-a-ka-honu, hulu moa, limoa		<i>Caulerpa</i> spp.
hulu moa	Pukui	90	Same as hulu manu.	hulu manu			
hulu poa'a	Pukui	90	A small, matted red seaweed (<i>Spyridia spinella</i>), its many branches covered with short bristles. It is rather common in shallow water near shore. It is eaten in South Hawaii, but not generally elsewhere.				<i>Spyridia spinella</i>
HULUPUA'A	Doty	3	(S. Hawaii)				<i>Spyridia spinella</i>
hulupuaa, limu	Reed	88	Not in general use, but eaten in the southern part of Hawaii.				<i>Spyridia spinella</i>
HULUWAWAE-IOLE	Doty	3	(Reed)				<i>Centroceras clavulatum</i> (C. Agardh) Montagne
hulu wawae-iole, limu	MacCaughy 1917	154		limu hulu-ilio, limu hulu			<i>Ceramium clavulatum</i> Agardh
hulu wawae-iole, limu	Reed	86		limu hulu'ilio, limu hulu			<i>Centroceras clavulatum</i> (C. Agardh) Montagne
HUNA	Doty	3	(Kona, Oahu, Kauai, Molokai)				<i>Hypnea armata</i> (Mert.) J. Agardh; <i>Hypnea nidifica</i> J. Agardh

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
huna	Magruder	79					<i>Hypnea cervicornis</i> J. Agardh
huna	Bryan		(Ike Oahu, Kauai, Molokai)				<i>Hypnea</i>
huna	Pukui	91	Common, fine, red seaweeds (<i>Hypnea</i> spp.), irregularly and more or less densely branching, thorny looking, eaten cooked, furnishes a good colloid when boiled.				<i>Hypnea</i> spp.
huna	Setchell	100	Stewed with meat.	limu huna			<i>Hypnea nidifica</i> J. Agardh
huna	Garmon	Interview	Doesn't eat this type of limu (recognized from picture in Magruder book).				
huna, limu	Neal						<i>Hypnea</i>
huna, limu	MacCaughy 1916	476	"the concealed or hidden limu"				<i>Hypnea</i> sp.
huna, limu	Chamberlain	32					
huna, limu	Abbott 1996	12	Gelatinizes on heating, used in stews or in imu.				
huna, limu	Reed	87	Found drifted on sand or rocks. Grow near the shore. Occasionally cooked in imu when there was famine or war and taro and sweet potatoes were scarce. Cooked with boiled meats long enough for the gelatin to be softened or dissolved. Especially prized for boiling with squid or octopus. Sometimes boiled and the hot infusion given for stomach ache.				<i>Hypnea nidifica</i> J. Agardh, <i>Hypnea armata</i> (Mert.) J. Agardh
HUNE	Doy	3					<i>Hypnea nidifica</i> J. Agardh
hune	Setchell	100					
hune, limu	Chamberlain	32					
HUNEHUNE	Doy	3	(Chamberlain)				
hunehune	Setchell	100					
hunehune	Pukui	91	Same as huna, a seaweed.	huna			<i>Hypnea</i> spp.

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
hunehune, limu	Chamberlain	32					
hūpēkohōhō	Pukui	92	A variety of seaweed.				
huwae	Setchell	100	Perhaps spelled huwai. Expanded species of <i>Codium</i>	huwai?			<i>Codium spongiosum</i> Harvey
HUWAI	Doty	3					<i>Codium spongiosum</i> Harvey
IHAU	Doty	1	(Chamberlain)				
Ii	Henriques-Peabody	863					
iliau	Kaina	Interview	Lawalu or boiled and then fed to the enemy. It gives them diarrhea. Come back 1-2 days later and hook them with the same limu tied to the hook. Also gives pig diarrhea. If in the sun, turns yellow.				
ilio	Bryan						<i>Cladophora</i>
ilio, limu	MacCaughey 1917	141		limu hulu-ilio, limu manu			<i>Cladophora antennina</i> (Bory) Kuetz.
ilio, limu	Reed	86		limu huluilio, limu manu			<i>Chaetomorpha antennina</i> (Bory) Kützing
ILIO	Doty	3					<i>Chaetomorpha antennina</i> (Bory) Kützing; <i>Cladophora</i>
Ilio	Pukui	99	A seaweed, same as some of the hulu Ilio 3 (<i>Chaetomorpha antennina</i>)	hulu Ilio			<i>Chaetomorpha antennina</i> (Bory) Kützing
ILIOHA	Doty	3	Probably = ILIOHAA.				<i>Ulva</i>
Illoha	Setchell	100	Species of limu with broad leaves; he limu lau palahatana				Probably <i>Ulva</i> sp.
Iliohe'a	Pukui	99	Same as lipahapaha, pahapaha, sea lettuce (<i>Ulva</i> and related genera)	lipahapaha, pahapaha, sea lettuce (<i>Ulva</i> and related genera)			<i>Ulva</i> and related genera
Illohā, limu	Chamberlain	32					
KA KANAKA	Doty	3	or KA-KANAKA-O-MANU'AKEPA (Hanalei, Kaua'i)				

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
kā-kanaka, limu	Pukui	207	A soft, sometimes gelatinous blue-green alga (<i>Nostoc commune</i>) sometimes covering the ground in the wet season as small shivery balls, especially at Hanalei, Kaua'i. Also limu kā-kanaka-o-Manu'akepa. Lit., man-striking moss, so called because people are said to slip on it and fall.		Also limu kā-kanaka-o-Manu'akepa		
KAHAKALA	Doty	3	(Chamberlain)				
kahakala	Setchell	100					
kahakala, limu	Chamberlain	32					
kāhili	Pukui	112	A seaweed, probably <i>Turbinaria ornata</i> .				<i>Turbinaria ornata</i> (Turner) J. Agardh
kāhili	Garmon	Interview	This is the really tough limu that looks like a kāhili (<i>Turbinaria ornata</i>).				<i>Turbinaria ornata</i> (Turner) J. Agardh
KALA	Doty	3					<i>Sargassum</i> spp.; <i>Sargassum echinocarpum</i> J. Agardh; <i>Sargassum cymosum</i> Agardh; <i>Sargassum polyphyllum</i> J. Agardh; <i>Turbinaria</i>
kala	Al Quin	Interview	Enene feed on kala, ribbon, etc.				
kala	Magruder	51, 53					<i>Sargassum echinocarpum</i> J. Agardh, <i>S. obtusifolium</i> J. Agardh, <i>S. polyphyllum</i> J. Agardh
kala	Pukui	120	See limu kala, seaweeds. For a pun on kala (plant and limu) see Neal 367.		limu kala	Surgefish, unicorn fish, Teuthidae; same as pua kala, prickly poppy; sweet potato, qualified with ke'oke'o and poni; same as 'Īkala; same as pīkalakala, a tern	
kala	Bryan						<i>Sargassum</i>
kala	Setchell	100	Always prefixed by the word limu. Ceremonial use of purification. Some say it is caton, others disagrec.				<i>Sargassum echinocarpum</i> J. Agardh, <i>Turbinaria ornata</i> (Turner) J. Agardh
kala	Simpson						
kala, limu	MacCaughy 1917	147	Are used for food (by natives).				<i>Sargassum obtusifolium</i> J. Agardh, <i>S. polyphyllum</i> J. Agardh, <i>S. densum</i> Dickie, <i>S. incisum</i> Dickie, <i>S. echinocarpum</i> J. Agardh, <i>S. cymosum</i> Ag.

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
kala, limu	Handy	215	Common, coarse, yellowish brown seaweed with small spiny leaves and round "berries"... It is edible though coarse; it is named kala (spine) because of the little spines on the leaves (which look like miniature holly leaves). Because kala also means "to loosen", this seaweed has many ceremonial uses. Thus, when a convalescent wants to be freed from all vestiges of his disease, he makes a lei of kala seaweed and swims seaward with it round his neck, allowing the waves to wash it off- withit will be "loosened" the guilt of other evils causing the illness. Riddle: Ke kala o uka, Ke kala o waena, Ke kala o kau. Answer: A kala berry, the pua kala, and the limu kala.				
kala, limu	Neal						<i>Sargassum echinocarpum</i> J. Agardh, <i>S. cymosum</i> Ag., <i>S. polyphyllum</i> J. Agardh
kala, limu	Abbott 1996	11	Ho'oponopono (eat the limu when pau), purification (water, 'oleua, limu kala). Lei worn by Iolani Luahine for a hula hoe.				<i>Sargassum</i> spp.
kala, limu	Pukui	207	Common, long, brown seaweeds (<i>Sargassum echinocarpum</i>), their stems covered with short branches, bearing rather stiff, twisted, more or less toothed, narrow leaves. Rarely eaten raw because of toughness (though edible); used in ceremonies to drive away sickness and to obtain forgiveness. May be qualified by terms lau li'i or lau nui. Also 'ikala.	'ikala	Also 'ikala		
kala, limu	Reed	88	Found drifted on sand or rocks. Dropped into hot soup or gravy as it is about to be served. Sometimes are ripened by soaking in fresh water. Leaves are separated from stems and floats, as only leaves are eaten. More often eaten fresh without any preparation (with raw fish or squid). Sometimes broken into small pieces and soaked in fresh water till dark and soft, then stuffed into salmon before roasting or chopped with fish heads and salt. Sometimes ripened in water with leho and salt for a few days before eating. Can be pounded with salt and bound about bruises and cuts to relieve pain. Used in ceremony for illness.				<i>Sargassum echinocarpum</i> J. Agardh, <i>S. cymosum</i> Ag., <i>S. polyphyllum</i> J. Agardh
kala, limu	Henriques-Peabody	863					
kala, limu	Kaina	Interview	Certain type is eaten. Some people cook it to soften it.				
kala, limu	Ewaliko	Audio	'A'ole 'ai 'ia, he mauu a he lā'au. Kekahi po'e 'oki'oki a 'ai.				
kala, limu	Tilden	133	Fronde of these two species are ground up into bits and mixed with raw fish torn into small shreds. Boiled with squid, they also regarded it as a great delicacy				<i>Sargassum</i>
kala, limu	Chamberlain	32					
kala, limu	Setchell	96	Atonement limu, ceremonial use, lei.				

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
kala, limu	Abbott 1996	23	Eaten by palani, onenue, kala. Used for bait. Two types - kala-launui, kala-lauli'i	limu honu			<i>Sargassum echinocarpum</i> J. Agardh
kala, limu	Garmon	Interview	Never ate limu kala, it was used ceremonially.				
kala, limu	Kaanana	Interview	According to the old stories, the kūkini (the chief's fastest runners) would use limu kala to wrap living fish that the chief desired and bring them long distances to the chief (and it would still be living).				
kala, limu	Howard	Interview	She doesn't eat this one.				<i>Sargassum echinocarpum</i> J. Agardh
kala wai	Pukui	122	See limu kala wai.		See limu kala wai		
kala wai, limu	Pukui	207	One or more kinds of dark green, slippery fresh-water algae (usually <i>Spirogyra</i> spp.) consisting of rows of cylindrical cells in unbranched filaments, common to fresh-water rivulets, dripping places, and taro patches. Also pālāwai.		Also pālāwai		<i>Spirogyra</i> spp.
KALA-LAU-LI'ILII	Doty	3	(Chamberlain fide Setchell)				
kalauliili	Setchell	101					
kalauliili, limu	Chamberlain	32					
KALALAUNUINUI	Doty	3	Probably = to KALA-LAU-NUI or NUNUI. NUNUI is pidgin				<i>Sargassum echinocarpum</i> J. Agardh
kalalauminua	Setchell	101					
kalalauminui, limu	Chamberlain	32					
KALAWAI	Doty	3	(a flowering plant)				<i>Nala major</i>
kalawai, limu	Reed	76	Often called fresh-water limu kala. Used as a love potion by saying a magic spell learned from a kahuna, eating the limu and giving some to the desired person.				
kanaloa, limu	Kapahulehua	Interview	A type of edible limu.				
KALIPOA	Doty	3					<i>Griffithsia ovalis</i> Harv.?
ka-lipoa, limu	Neal						<i>Griffithsia</i>

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
ka-lipoa, limu	Reed	87	This alga is considered a delicacy on Maui and southern Hawaii, but is very scarce and spoils very soon, so have not been able to secure enough to identify the species	limu moopuna, limu aupupu			<i>Griffithsia</i> sp.?
ka-lipoa, limu	MacCaughy 1917	154		limu moo-puna, limu au-pupu			<i>Griffithsia ovalis</i> Harv.?
KAU-PAU	Doty	3					<i>Chonospora fastigata pacifica</i> J. Ag.
kauna'oa	Pukui	138	A coarse, tough seaweed (<i>Galaxaura rugosa</i>), calcified and inedible, resembling kauna'oa (<i>Cuscuta sandwichiana</i>) in being yellow to gold in color.	kauno'a, 'okala		native dodder, mollusk (Vermetidae)	<i>Galaxaura rugosa</i> (Ellis et Solander) Lamouroux
kaunos	Setchell	102				a worm that causes universal withering of trees and herbs; dodder	<i>Galaxaura rugosa</i> (Ellis et Solander) Lamouroux
KAUNO'A	Doty	3					<i>Galaxaura rugosa</i> (Ellis et Solander) Lamouroux
kauno'a	Pukui	138	A rough seaweed (<i>Galaxaura rugosa</i>). Cf. pākalakala.	'okala, kauna'oa	Cf. pākalakala.	native dodder, mollusk (Vermetidae)	<i>Galaxaura rugosa</i> (Ellis et Solander) Lamouroux
kaupau	Pukui	139	An edible brown seaweed (<i>Chonospora pacifica</i>), with many slender branches. Also wāwahiwa'a	wāwahiwa'a	Also wāwahiwa'a		<i>Chonospora pacifica</i> J. Agardh
kau-pau, limu	MacCaughy 1917	148		limu wa-wahi-wa'a			<i>Chonospora fastigiata pacifica</i> J. Agardh
kaupau, limu	Reed	86		limu wāwahiwa'a			<i>Chonospora fastigata pacifica</i> J. Ag.
KEKUWELU	Doty	3	Probably = KE KUWELU				<i>Gelidium</i> spp?
kekuwelu, limu	Reed	87		limu kuwelu			<i>Gelidium</i> sp.?
KELE	Doty	3	(Chamberlain)				
kele	Setchell	102					
kele, limu	Chamberlain	32					
KIHE	Doty	3					<i>Chylocladia rigens</i> (Ag.) J. Ag.
Kihe	Henriques-Peabody	863					

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
kihe	Pukui	147	A red seaweed (<i>Chytocladia</i> sp.) with narrow cylindrical, branching stems. Also akuila.	akuila		A small native fern (<i>Xiphopteris saffordii</i>); a variety of sweet potato	<i>Chytocladia</i> sp.
kihe	Haario	Audio	'Ai me ka 'opihi, i'a maka. Limu kana' iina o Kona. Limu kui kōlā, 'a'ole 'ai pa'a like me ka līpe'ope'ope...' 'A'ala, 'ono.				
kihe, limu	MacCaughy 1917	152		limu akuila			<i>Chytocladia rigens</i> (Ag.) J. Ag.
kihe, limu	Reed	86		limu akuila			<i>Chytocladia rigens?</i> (Ag.) J. Ag.
KIKALA	Doty	3					<i>Centroceras clavulatum</i> (C. Agardh) Montagne
kikala	Setchell	102					<i>Centroceras clavulatum</i> (C. Agardh) Montagne
KIKI	Doty	3	(Chamberlain)				
kiki	Setchell	102					
kiki	Pukui	149	A seaweed.			A bird resembling a plover; name given a shellfish.	
kiki, limu	Chamberlain	32					
kimau	Henriques-Peabody	863					
KIPA-AKAI	Doty	3	Probably = LI PAAKAI				<i>Asparagopsis sanfordiana</i> Harv.
KO'ELE	Doty	3	(Reed). See KOELLEELE				
kō'ele	Pukui	158	Same as kō'ele'ele.	kō'ele'ele		any variety of large, tough 'opihi	<i>Gymnogongrus</i>
kō'ele	Howard	Interview	She picks up this limu at a place called laupapa 'ōhua (reef with manini fish babies). This limu is eaten with 'opihi.	kō'ele'ele			<i>Ahnfeltopsis flabelliformis</i> (Harvey) Masuda
kō'ele, limu	Ellis	Video: 'AM	Uua. Uu me ka hā'uko'uke.				
koele, limu	MacCaughy 1916	476	"the dry or hard limu"				<i>Gymnogongrus</i> sp.

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
koele, limu	Reed	87		limu uauololi, limu ekahackaha, limu koelele, limu awikiwiki, limu nei			<i>Gymnogongrus vermicularis americana</i> J. Ag., <i>Gymnogongrus disciplinatus</i> (Bory) J. Ag.
koelele	Setchell	102	Name used without term limu attached. Dwarfed and undeveloped form of <i>Gymnogongrus</i> . May be an alternate name for akiaki.	akiaki			<i>Gymnogongrus</i> sp.
koelele	Henriques-Peabody	863					
KO'ELE' ELE	Doty	3	See KOELE (Reed); see AKIAKI				<i>Gymnogongrus</i> ; <i>Gymnogongrus vermicularis americana</i> J. Ag.; <i>Gymnogongrus disciplinatus</i> (Bory) J. Ag.
kō'ele'ele	Pukui	158	Small, red edible seaweeds (<i>Gymnogongrus</i> spp.) [<i>Gymnogongrus</i> ?] with rather thick, flattened stems and branches.	kō'ele, nei, 'āwikiwiki	'āwikiwiki, 'ekahackaha, kō'ele, limu uaua loli, nei		<i>Gymnogongrus</i>
kō'ele'ele	Howard	Interview	She picks up this limu at a place called laupapa 'ōhūa (reef with manini fish babies). This limu is eaten with 'opihi.	kō'ele			<i>Ahyfeliopsis flabelliformis</i> (Harvey) Masuda
ko-ele-ele, limu	MacCaughy 1917	150		limu ua-ua-loli, limu ekaha-kaha, limu awiki-wiki, limu nei			<i>Gymnogongrus vermicularis americana</i> J. Ag., <i>G. disciplinatus</i> (Bory) J. Ag.
koelele, limu	Chamberlain	32					
koelele, limu	Reed	87		limu uauololi, limu ekahackaha, koele, limu awikiwiki, limu nei			<i>Gymnogongrus vermicularis americana</i> J. Ag., <i>Gymnogongrus disciplinatus</i> (Bory) J. Ag.
KOHU	Doty	3					<i>Asparagopsis sanfordiana</i> Harv.
kohu	Ali Quin	Interview	Color and iodine depends on area gathered. November, April is kau. Red one has low iodine.				
kohu	Magruder	59					<i>Asparagopsis taxiformis</i> (Dehile) Trevisan
kohu	Setchell	103	Always prefixed by the word limu. Kohu means to color or stain. "One year limu"	limu koko, lipakani (Maui)			<i>Asparagopsis sanfordiana</i> Harv.
kohu	Bryan						<i>Asparagopsis sanfordiana</i> Harv.
kohu	Miller						
kohu, limu	Kaina	Interview	The best. Crisp, strong smell. Lots of rain makes limu grow, the kohu can get really long.				
kohu, limu	Poepoe	Video: TME	Mo'omomi has the best limu kohu. There are two ways to pick limu: cutting, pulling but leaving the roots behind.				

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
kohu, limu	Ewaliko	Audio	\$20/ ʻōmole (quart), limu kohu. Aia i waho loa kēia limu, 'ula'ula. Wae 'ia ka mea a pau a ho'okū i loko o ka wai pa'akai. I kekahi lā, helele i mai ka lepo a pau loa. A ma'ema'e, 'oki'oki o kōpū hou. Ke huki mai 'oe, hemo pū mai nō me ke one, a lawe 'oe i ka mea o lalo aia ka limu i luma. 'O lalo, aia i laila ke kumu.				
kohu, limu	Wong	Interview	About four days after it rains, you can go get the limu kohu. This is the main limu eaten on Ni'ihau.				
kohu, limu	Kaushipaula	Video: 'AM	Huki i ka limu kohu.				
kohu, limu	Reed	86	This limu is usually called limu kohu, except on Maui, Molokai, and Kauai. It is often called limu lipaakai and sometimes limu lipehu. Lima koko is a corruption of kohu. Grow far out on the coral reefs or on exposed rocks in the surf. Dropped into hot soup or gravy as it is about to be served. Always pounded well as its being cleaned to free it from adhering bits of coral, and also so that it may be soaked more thoroughly to remove the disagreeable bitter flavor. Sometimes mixed with inonona. Gonads of sea urchins are sometimes mixed with this limu.	limu lipaakai, limu lipehu, limu koko			<i>Asparagopsis sanfordiana</i> Harv.
kohu, limu		Video: 'AM	Ki'i 'ia i ka manawa kai malo'o ma hope o ka ua nui. Ho'okū i loko o ka wai a ka pō, a laila e ho'oma'ema'e a kōpū i ka pa'akai.				
kohu, limu	MacCaughy 1917	152	It has a variety of Hawai'ian names, limu kohu being the most common. On Maui, Molokai, and Kauai it is often called limu lipa-akai, or limu lipehu.	limu lipa-akai, limu lipehu			<i>Asparagopsis Sanfordiana</i> Harv.
kohu, limu	Henriques-Peabody	863					
kohu, limu	Neal						<i>Asparagopsis Sanfordiana</i> Harv.
kohu, limu	Ellis	Video: 'AM	Kauai's kohu is loloa (long) where it is 'oki 'ia. O'ahu's kohu is pokopoko (short).				
kohu, limu	Pukui	207	A soft, succulent, small seaweed (<i>Asparagopsis taxiformis</i>), with densely branched furry tops that are tan, pink, or dark red, arising from a creeping stem-like portion; one of the best liked edible seaweeds, prepared in balls for market. Also limu koko and for some informants lipehe, lipehu, lipa'akai		Also limu koko and for some informants lipehe, lipehu, lipa'akai		<i>Asparagopsis taxiformis</i> (Delile) Trevisan
kohu, limu	Abbott 1996	24	Two types - kohu lipehe = light colored, kohu koko = dark red (Kauai) distinction). Choice limu of ali'i	limu lipa'akai (Ni'ihau), lipehe and lipa'akai (Maui).			<i>Asparagopsis taxiformis</i> (Delile) Trevisan
kohu, limu	Abbott 1996	9, 13	Cleaned in salt water, then in fresh water and soaked overnight. Add salt. Mālama 'ia ma loko o ka pū'olo la'i. Two color forms, koko (blood-red) or lipehe (light-colored).				

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
kobu, limu	Lind	Interview	Method for planting limu kobu. Take back the roots (holdfasts) that sometimes come out when picking this limu, and stuff them into little holes in the reef where limu kobu normally grows.				
kobu, limu	Howard	Interview	She picks up this limu at a place called laupapa 'ihua (reef with manini fish babies).				<i>Asparagopsis taxiformis</i> (Delile) Trevisan
KOIALE	Doty	3	(Chamberlain)				
koiale	Setchell	103					
koiale, limu	Chamberlain	32					
KOKO	Doty	3					<i>Asparagopsis sanfordiana</i> Harv.; <i>Laurencia</i> spp?
koku	Setchell	103	Soft, young form of <i>Laurencia</i> according to some people.	limu kobu			
koko	Pukui	161	Same as limu kobu, a seaweed.	limu kobu		Same as 'akoko	<i>Asparagopsis taxiformis</i> (Delile) Trevisan
koko, limu	Pukui	207	Same as limu kobu. Lit., blood seaweed.	limu kobu			<i>Asparagopsis taxiformis</i> (Delile) Trevisan
koko, limu	Chamberlain	32					
koko, limu	Henriques-Penbody	863					
koko, limu	MacCaughy 1916	476	"the red limu"				<i>Asparagopsis Sanfordiana</i> Harv.
koko, limu	Reed	86		limu koko, limu lipaakoi, limu lipahu			<i>Asparagopsis Sanfordiana</i> Harv.
KOLOA	Doty	3	(Chamberlain)				
koloa	Setchell	103					
koloa, limu	Chamberlain	32					
kikae-o-Kanapua'a	Pukui	176	Same as lipu'upu'u, a seaweed.	lipu'upu'u			

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
KUKAEPUEO	Doty	3	ex Andrews Dictionary (Setchell).				
kukaepueo	Setchell	103				species of grass	
KULAPEPEIAO	Doty	4	Distorted <i>Gracilaria coronopifolia</i> (Setchell)				<i>Gracilaria coronopifolia</i> J. Agardh
kulapepeiao	Setchell	104	A distorted <i>Gracilaria coronopifolia</i> . Means earring.				
KUMULIMUKALA	Doty	4	(Chamberlain)				
kumulimukala	Setchell	104					
kumulimukala, limu	Chamberlain	32					
KUMULIPOA	Doty	4	(Chamberlain)				
kumulipoa	Setchell	104					
kumulipos, limu	Chamberlain	32					
KUWELU	Doty	4					<i>Gelidium</i> spp?
kuwelu	Henriques-Peabody	863					
kūwelu	Pukui	187	Same as limu loloa.	limu loloa		woody shrub with a long tail-like inflorescence resembling cockscomb, perhaps an amaranth	
kuwelu, limu	Reed	87		limu kekuwelu			<i>Gelidium</i> sp.?
la'au kanaka	Abbott 1996	33	Man's medicine (<i>Galaxaura</i>)				<i>Galaxaura</i>
lehelehe 'ilio	Pukui	199	Same as lepe-o-Hina, seaweeds.	lepe-o-Hina			<i>Habymenia formosa</i> Harvey ex Kützting
lepe-a-Hina, limu-a-Hina	Ali Quin	Interview	Red and slimy. Eaten with lemon and soif.				

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
LEPE-AHINA	Doty	4	Probably = LEPE-O-HINA				<i>Halymenia formosa</i> Harvey ex Kutzing
lepe' ahina	Magruder	77					<i>Halymenia formosa</i> Harvey ex Kutzing
lepeahina, limu	Reed	87	Very perishable, must be cleaned in salt water and eaten soon after preparation.				<i>Halymenia formosa</i> Harvey ex Kutzing
lepelepe-o-Hina	Pukui	204	Same as lepe-o-Hina, a seaweed.	lepe-o-Hina		Monarch butterfly; Kamehameha butterfly; nudibranchia	<i>Halymenia formosa</i> Harvey ex Kutzing
lepe-o-Hina	Pukui	204	A red seaweed (<i>Halymenia formosa</i>) with flat blades bearing fringed and irregular margins, with a variety of colors ranging from red to yellow; common allusion to swirling in water resembling movement of pā'ū in dancing. Also called lehelehe 'Ilio, lepelepe-o-Hina, limu-pepe-o-Hina, pā'ū-o-Hi'iaka.	lehelehe 'Ilio, lepelepe-o-Hina, limu-pepe-o-Hina, pā'ū-o-Hi'iaka	Also called lehelehe 'Ilio, lepelepe-o-Hina, limu-pepe-o-Hina, pā'ū-o-Hi'iaka	Same as lepelepe-o-Hina, a butterfly	<i>Halymenia formosa</i> Harvey ex Kutzing
Lepe-o-Hina, limu	Abbott 1996	26	Eaten on same day.	limu lepe'ula'ula			<i>Halymenia formosa</i> Harvey ex Kutzing
leponalo	Pukui	204	A kind of seaweed.				
leponalo	Henriques-Peabody	863					
likolehua	Pukui	205	A kind of seaweed.			sweet potato variety	
limanamana	Pukui	207	A kind of seaweed. Lit., branching seaweed				
limoa	Pukui	207	Same as hulu moa, a seaweed.	hulu moa			
LIMU	Doty	4	Algae in Samoan and Hawaiian.				
limu	Andrews		sea-moss or sea-grass; a general name of every kind of eatable herb that grows in the sea; the Hawaiians also class the limu among fish; the varieties are... (listed throughout database under Source: Andrews)				
limuolaula	Andrews						
limuckaha	Andrews						
limu-elele-kai	Akana	60	Used as food. Mixed with other medicines, it becomes very effective for the removal of white blotches on the skin.				

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
limuhinaula	Andrews						
limuhululio	Andrews						
limubuna	Andrews						
limu-huna	Akana	63	Used as food and cooked together with squid. Used for the cure of disorder in the alimentary canal.				
limuliiohaa	Andrews						
limakahakala	Andrews						
limukala	Andrews						
limu-kala-kai	Akana	59	Used as food. This, and the "lipoa" or fragrant sea weed, chewed together with baked taro by the mother and fed to the child forty days old, makes a good remedy for bodily weakness.				
limu-kalawai	Akana	59	This water weed, a good article of food, grows in fish-ponds almost anywhere around these islands. Used medicinally for the relief of the burning effect which frequently occurs about the chest.				
limukele	Andrews						
limu-kele	Akana	60	Black and tough water weed which grows in taro patches and in running streams. Used for menstruation.				
limukiki	Andrews						
limukoko	Andrews						
limulipahapala	Andrews						
limu-li-palahalaha	Akana	61	Grows abundantly in rivers, deep green in color and quite puffed in appearance. It is used as food with warm pork and beef stew and helpful for stomach ache if mixed with young taro leaves and baked.				
limulipalo	Andrews						
limulipalawai	Andrews						

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
limu-lipala-wai	Akane	61	Used as food and for the removal of the congestion about the chest.				
limu-li-pehu	Akane	62	It is effective for the cure of white blotches on the skin or for rash.				
limu-li-puu-puu	Akane	61	It has seeds that are lumpy in appearance and it looks rough and a very good article of food. Its odor is somewhat fragrant. Used for bodily weakness, especially in children.				
limulipoa	Andrews						
limu-lipoa-kai	Akane	60	Used as food. Used for those afflicted with sores in the mouth, especially children. It is also used for children having weakness of the body.				
limulipupu	Andrews						
limulipaule	Andrews						
limulipuupuu	Andrews						
limuloloa, limu	Chamberlain	32					
limu-luau	Akane	62	Grows in very deep water and is picked up off the shore after currents bring it in. It is helpful for trouble about the chest.				
limu-make-o-Hāna	Pukui	207	A coelenterate (<i>Falythoa</i> sp.) containing a toxin, reported as deadly poisonous at Hāna, Maui. Also limu-make-o-Mu'olea		Also limu-make-o-Mu'olea		
limu-manaua	Akane	62	Used as food, usually cooked with stewed beef or with squid. As a remedy, it is largely employed for the cure of miscarriage.				
limunanaue	Andrews						
limuopai	Andrews						
limupaakua	Andrews						
limu-pehapa-kai	Akane	62	Used as food. It is used for the relief of those affected with asthma, especially those having very severe cases.				
limu-pehapa-wai	Akane	63	It is used for the relief of those affected with asthma, especially those having very severe cases.				

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
limupalahalaha	Andrews						
limupalawai	Andrews						
limu-pepe-o-Hina	Pukui	207	Same as lepe-o-Hina, a seaweed.				<i>Halymenia formosa</i> Harvey ex Kützting
limupipilani	Andrews						
LIMULOLOA	Doty	4	(Chamberlain)				
limuloloa	Andrews						
limuulaula	Andrews						
lipaskai	Setchell	104	Means "sal" limu."	limu koko, limu koku			
LIPA'AKAI	Doty	4	(Setchell)				
LIPA'AKAI	Doty	4					<i>Asparagopsis Sanfordiana</i> Harv.
līpa'akai	Pukui	208	Limu salted for indefinite storage without refrigeration; on Kauai usually limu koku from Ni'ihau. Some consider līpehe, līpehu, and līpa'akai as variants of limu koku.				
li-paakai, limu	Akana	61	Used as food, frequently eaten with raw fish such as "oio" or "awaaua." The name applies when it is not detached from the rocks. When it is, it takes the name "limukoku". Used medicinally for healing a sprain, relieving stomach ache, pain about the wrist and knee and back ache.				
lipa-akai, limu	MacCaughy 1917	152		limu koku, limu līpehu			<i>Asparagopsis Sanfordiana</i> Harv.
lipaakai, limu	Reed	86		limu koku, limu līpehu, limu koko			<i>Asparagopsis Sanfordiana</i> Harv.
lipaha	Setchell	104					
lipaha	Pukui	208	Same as lipahapaha, a seaweed.	lipahapaha			<i>Ulva fasciata</i> Delile and <i>Monostroma oxyspermum</i> (Kützting) Doty

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
lipahapaha	Henriques-Peabody	863					
lipahapaha	Pukui	208	A general term for sea lettuce (<i>Ulva fasciata</i> and <i>Monostroma oxyspermum</i>), common green seaweeds with delicate broad blades, usually with wavy margins. Eaten as a minor element mixed with other tastier seaweeds. Also 'Ōiōha'a, lipaha, lipaha, lipālahalaha, pahapaha (probably restricted to Kaua'i), pakaiea (restricted to Hawai'i), and pālahalaha (Maui, Moloka'i, and O'ahu).		Also 'Ōiōha'a, lipaha, lipaha, lipālahalaha, pahapaha (probably restricted to Kaua'i), pakaiea (restricted to Hawai'i), and pālahalaha (Maui, Moloka'i, and O'ahu).		<i>Ulva fasciata</i> Delile and <i>Monostroma oxyspermum</i> (Kützinger) Doty
lipahapaha, limu	Reed	88	Sometimes boiled with squid.				<i>Ulva lactuca rigida</i> (Agh.) Le Jolis
lipahapaha, limu	Chamberlain	32					
LIPAHAPALA	Doty	4					<i>Ulva lactuca</i>
lipahapala	Setchell	104					
lipahee	Setchell	105	Found on Maui.	pahee			
LIPAHE'E	Doty	4	(Maui), = PAHEE (Hawaii); (Hawaii) <i>Porphyra leucosticta</i> (Reed)				<i>Porphyra leucosticta</i> Thuret
lipahe'e	Pukui	208	Same as limu lū'au, a seaweed. Kaua'i.	limu lū'au			
lipahe'e	Pukui	208	Same as pāhe'ehe'e, a seaweed. Called lipāhe'e on Maui.	pāhe'ehe'e, lipāhe'e (Maui)			
lipahee, limu	Reed	88	Reported only from two islands and scarce; called limu luau on Kauai and limu lipahu on Hawaii. Grow quite near the tide line along shore, but on exposed black lava rocks in rough water. Appears in winter or spring after heavy storms and last for only a few days. Washed in fresh water, salt added, put into clear water. Sometimes opihi is added and kept in jars for many weeks. Pounded in a pulp with salt and the juice is used to moisten bandages on cuts or bruises.	limu luau			<i>Porphyra leucosticta</i> Thuret
lipahe'ehe'e	Pukui	208	Same as lipahe'e.	lipahe'e			
lipāhe'ehe'e	Pukui	208	Same as lipahe'e.	lipahe'e			

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
Īpāhōe	Pukui	208	Same as Īpāhō'e, a seaweed. Maui.	Īpāhō'e			
LIPAKAI	Doty	4	ex Chamberlain (= LIPAAKAI?)				
Īpakai	Setchell	105	Possible contraction or misprint of Īpakai.				
Īpakai, limu	Chamberlain	32					
LIPALAHALAHĀ	Doty	4	<i>Ulva fasciata</i> (Maui); <i>Ulva</i> spp., <i>Monostroma</i> spp. (Setchell); <i>Ulva lactuca</i> ; LIPALAHALOHA (Setchell)				<i>Ulva fasciata</i> Delile; <i>Ulva</i> spp., <i>Monostroma</i> spp.; <i>Ulva lactuca</i>
Īpalahalaha	Setchell	105	Maui name for pakaiea.	pakaiea (Hawai'i)			<i>Ulva</i> spp., <i>Monostroma</i> spp.
Īpāhalalaha	Pukui	208	Same as Īpāhapaha, sea lettuce.	Īpāhapaha			<i>Ulva fasciata</i> Delile and <i>Monostroma oxyspermum</i> (Kützinger) Doty
Īpa-laha-laha, limu	MacCaughy 1917	138		limu paka-ea			<i>Ulva lactuca</i>
Īpalahalaha, limu	Reed	88		limu pakaea			<i>Ulva lactuca lactuca</i> (Wulf.) J. Ag.
Īpalao	Setchell	105					
LIPALA'O	Doty	4	(Chamberlain)				
Īpala'ō	Pukui	208	Same as Īpālāwai, fresh-water algae.	Īpālāwai	Same as Īpālāwai		
Īpalao, limu	Chamberlain	32					
Īpalawai	Henriques-Peabody	863					
Īpalawai	Setchell	105	Found in fresh running water and brackish water where it is dark greenish brown.				
Īpālāwai	Abbott 1996	13	Freshwater or brackish water algae also eaten by mauka dwellers.	limu pālāwai			
Īpālāwai	Pukui	208	Edible, green, fresh-water algae, consisting of tufts of branching threads (<i>Pithophora</i> spp. and <i>Sigmoelanium</i> spp.), or of a network of threads (<i>Hydrodictyon</i>), or of simple threads (<i>Spirogyra</i> spp.). Also Īpala'ō, nehe, pala'ō, pālāwai		Also Īpala'ō, nehe, pala'ō, pālāwai		<i>Pithophora</i> spp. and <i>Sigmoelanium</i> spp. or <i>Hydrodictyon</i> or <i>Spirogyra</i> spp.

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
LI-PĀLĀ-WAI	Doty	4					<i>Stigeoclonium falklandicum</i> Kuetz.; <i>Pithophora affinis</i> Nordst.
li-pala-wai, limu	MacCaughy 1917	139		limu pala-wai			<i>Stigeoclonium Falklandicum</i> Kuetz.
li-pala-wai, limu	MacCaughy 1917	142		lime pala-wai			<i>Pithophora affinis</i> Nordst.
lipalawai, limu	Chamberlain	32					
lipalawai, limu	Reed	88		limu palawai			<i>Pithophora affinis?</i> Nordst., <i>Pithophora polymorpha</i> , <i>Stigeoclonium</i> sp.?
LIPALU	Doty	4					<i>Laurencia</i>
lipalu	Henriques-Peabody	863					
lipalu	Setchell	106	Young plants of a species of <i>Laurencia</i>				<i>Laurencia</i> sp.
lipalu	Pukui	208	A seaweed much like hulu 'Ōio 3 <i>Cladophora nitida</i>), and perhaps the same; edible, green, soft, slippery tufts.	hulu 'Ōio			<i>Cladophora nitida</i> Kuetz.
lipaoso	Pukui	208	A seaweed. Lit., fragrant seaweed.				
lipee	Reed	87		limu lipeepee			<i>Laurencia pinatifida</i> (Gmel.) Lam., <i>L. perforata</i> Mont., <i>L. obtusata</i> , <i>L. virgata</i> (Ag.) J. Ag.
LIPE'E	Doty	4	? contraction of LIPEEPEE (MacCaughy)				<i>Laurencia</i>
lipe'e	Pukui	208	Same as lipe'epe'e.	lipe'epe'e			
lipee, limu	Reed	87		limu manono, limu alipeepee			<i>Laurencia pinnatifida</i> (Gmel.) Lam.
lipee, limu	MacCaughy 1917	153		limu li-pee-pee			<i>Laurencia</i> spp.
lipeepee	Setchell	106	"One day limu."				<i>Laurencia obtusa</i> var. <i>racemosa</i> , <i>Amanzia glomerata</i> Ag.
lipeepee	Henriques-Peabody	863					

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
LIPE'EPE'E	Doty	4	<i>Laurencia</i> (MacCaughy); <i>Amanzia glomerata</i> (Puna?, Hawaii); <i>Laurencia obtusa</i> var. <i>racemosa</i> (Setchell)				<i>Laurencia</i> ; <i>Amanzia glomerata</i> Ag.; <i>Laurencia obtusa</i> var. <i>racemosa</i>
lipe'epe'e	Magruder	81					<i>Laurencia succisa</i> Cribb
lipe'epe'e	Ewaliko	Audio	'Aina Haina. Crunchy. 'O'i aku ka 'ono o ka lipe'epe'e ma mua o ka manaua.				
lipe'epe'e	Keohokalole	Video: AM	Season is Kekemapa, New Year. Kunalu has that kind of good limu.				
lipe'epe'e	Pukui	208	Some native species of a genus of edible seaweeds <i>Laurencia parvipapillata</i> . <i>L. dotyi</i> , <i>L. succisa</i>), short, with stiff, knobby branchlets, nestling especially in basaltic rock. Also 'ape'epe'e, ho'onunu, lipe'e, pe'epe'e.		Also 'ape'epe'e, ho'onunu, lipe'e, pe'epe'e.		<i>Laurencia parvipapillata</i> Tseng, <i>L. dotyi</i> Saito, <i>L. succisa</i> Cribb
lipe'epe'e	Kauahipaula	Video: AM	Ma Nānākuli. Aia i tala o ka 'aki'aki				
lipe'e'pe'e	Haanio	Audio	Loa'a ma Kona, 'a'ole nui.				
lipe'e'pe'e	Howard	Interview	She picks up this limu at a place called laupapa 'ōlūa (reef with manini fish babies).				<i>Laurencia</i> spp.
li-pee-pee, limu	MacCaughy 1917	153	For the finer, longer forms.	limu lipee			<i>Laurencia</i> spp.
lipeepee, limu	Reed	87	Grow far out on the coral reefs or on exposed rocks in the surf. Very perishable, must be cleaned in salt water and eaten soon after preparation. Cooked with boiled meats long enough for the gelatin to be softened or dissolved. Sometimes used in inomona.	limu maneoao			<i>Laurencia papillosa</i> (Forst.) Grev.
lipeepee, limu	Reed	87	Found drifted on sand or rocks. Grow far out on the coral reefs or on exposed rocks in the surf. Very perishable, must be cleaned in salt water and eaten soon after preparation. Cooked with boiled meats long enough for the gelatin to be softened or dissolved. Sometimes used in inomona.	lipee			<i>Laurencia pinatifida</i> (Gmel.) Lam., <i>L. perforata</i> Mont., <i>L. obtusata</i> , <i>L. virgata</i> (Ag.) J. Ag.
lipeepee, limu	Neal						<i>Laurencia</i> spp.
lipeepee, limu	Neal						<i>Laurencia</i> spp.
lipe'epe'e, limu	Abbott 1996	30	Some have transferred name to <i>Acanthophora spicifera</i> but some informants recognize this error.	lipe'e, lipee (Ni'ūhau), limu ape'epe'e (variety of lipe'epe'e).			<i>Laurencia succisa</i> Cribb; <i>L. dotyi</i> Saito
lipe'epe'e, limu	Abbott 1996	12	Kapu to hula dancers.				<i>Laurencia</i> spp.
lipeche	Pukui	208	Same as lipe'akai, salted limu.	lipe'akai			

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
LIPEHU	Doty	4					<i>Asparagopsis Sanfordiana</i> Harv.
lipehu	Setchell	106					
lipehu	Pukui	208	Same as lipe'akai, salted limu.	lipe'akai			
lipehu, limu	Reed	86		limu koku, limu lipakai, limu koko			<i>Asparagopsis Sanfordiana</i> Harv.
lipehu, limu	MacCaughy 1917	152		limu koku, limu lipe-akai			<i>Asparagopsis Sanfordiana</i> Harv.
lipehu, limu	Chamberlain	32					
lipépe	Pukui	208	Same as lipe'epe'e. Ni'ihau	lipe'epe'e			
lipepeiao	Henriques-Penbody	863					
lipepeiao	Pukui	208	A seaweed. Also limu pepeiao and limu kulapepeiao			Also limu pepeiao and limu kulapepeiao a fresh-water moss, usually qualified by wai.	
LI-PEPE-IAO	Doty	4					<i>Amansia glomerata</i> Ag.
li-pepe-iao, limu	MacCaughy 1917	154	Used for food.	limu pepe-iao			<i>Amansia glomerata</i> Ag.
lipepeiao, limu	Reed	86	Different forms of the same name on Hawaii, not widely used, local.	limu pepeiao			<i>Amansia glomerata</i> Ag.
LIPEWALE	Doty	4	(Chamberlain)				
lipewale	Setchell	106					
lipewale, limu	Chamberlain	32					
LIPOA	Doty	4	"not strong kind" <i>Dictyota divaricata</i> (Setchell); <i>Dictyota dichotoma</i> ; <i>Haliseris pardalis</i> (Reed); <i>Haliseris plagiogramma</i> ; <i>Dictyota acutifolia</i> var. <i>distorta</i> (Neal)				<i>Dictyota divaricata</i> Lamouroux; <i>Dictyota dichotoma</i> (Huds.) Lamouroux; <i>Haliseris pardalis</i> ; <i>Haliseris plagiogramma</i> Mont.; <i>Dictyota acutifolia</i> var. <i>distorta</i> I. Ag.
lipoa	Magruder	41					<i>Dictyopteris australis</i> (Sonder) Askenasy, D. <i>plagiogramma</i> (Montagne) Vickers

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
lipoa	Miller						<i>Haliseris plagiogramma</i> Mont.
lipoa	Simpson						
lipoa	Setchell	92, 105	Most delicious fragrance. Word limu not applied to this name in speaking				<i>Haliseris plagiogramma</i> Mont., <i>Dictyota divaricata</i> Lamouroux, <i>D. dichotoma</i> (Huds.) Lamx., <i>D. patens</i>
lipoa	Herrigua-Peabody	863					
lipoa	Bryan						<i>Haliseris</i>
lipoa	Kaina	Interview	There are different kinds of lipoa.				
lipoa	Wong	Interview	The kala and nenu eat the lipoa. On Ni'ihau, there is a lot of lipoa, but the Ni'ihau people consider it 'opala (rubbish). When it is the right season, the ocean is thick with lipoa and it washes up on the sand making a very strong smell.				
lipoa	Haanio	Audio	Loa'a ma Kona, 'a'ole nui.				
lipoa	Ewaliko	Audio	Holo i nō 'oe, kaka 'oe a 'oki'oki. Ho'okomo i loko o ka 'ōmole. Maunaloa used to be (Hawai i Kai now). He manawa nō e pōe mai. 'A'ole hana lei 'ia, he mea ai wale nō.				
lipoa	Ellis	Video: 'AM	Waikiki is onona i ka lipoa.				
lipoa	Ah Quin	Interview	Kau is February on Maui.				
lipoa	Pukai	208	Bladelike, branched, brown seaweeds <i>Dictyopteris plagiogramma</i> and <i>D. australis</i> with conspicuous midrib on blade, unique aroma and flavor, highly prized on all islands.				<i>Dictyopteris plagiogramma</i> (Montagne) Vickers and <i>D. australis</i> (Sonder) Askenasy
lipoa	Garmon	Interview	Her all time favorite limu is lipoa.				
lipoa, limu	Reed	87	Grow far out on the coral reefs or on exposed rocks in the surf. Iron rod is used to loosen sometimes. Dropped into hot soup or gravy as it is about to be served. Very often pounded and mixed with other seaweeds to give them its peculiar penetrating, spicy flavor and odor.				<i>Haliseris pardalis</i> , <i>Haliseris plagiogramma</i> Mont.
lipoa, limu	MacGaughey 1917	148	It is a favorite among the natives.				<i>Haliseris plagiogramma</i> Mont.
lipoa, limu	Chamberlain	32					

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
lipoa, limu	Neal						<i>Haliseris plagiogramma</i> Mont., <i>Dictyota acutiloba</i> var. <i>distorta</i> J. Ag.
lipoa, limu	Abbott 1996	20	Said to be eaten by 'o'io fish. Eaten with uhu, he'e maka, ake, or by itself with poi.	lipa'akai (heavily salted limu in general)			<i>Dictyopteris plagiogramma</i> (Montagne) Vickers. <i>D. australis</i> (Sonder) Askenasy
lipoa, limu	Abbott 1996	13	Cleaned in salt water, then in fresh water and pounded. Add salt.				
lipohāpohā	Pukui	208	Same as pohāpohā 3, a seaweed.	pohāpohā			<i>Dictyosphaeria cavernosa</i> (Forsskal) Borgesen
LIPUPLU	Doty	4	(Chamberlain)				
lipupu	Setchell	107					
lipupu, limu	Chamberlain	32					
lipu'u	Pukui	208	Same as lipu'upu'u.	lipu'upu'u, kūkae-o-Kamapua'a			
LIPUULA	Doty	4	(Chamberlain)				
lipoula	Setchell	107					
lipoula, limu	Chamberlain	32					
lipuupuu	Henriques-Peabody	863					
lipuupuu	Setchell	107	Keeps only one day.				<i>Dictyosphaeria favulosa</i> (Ag.) Dcne.
lipuupua, limu	Chamberlain	32					
lipuupua, limu	Neal						<i>Laurencia</i> spp.
lipuupua, limu	Reed	87		limu munconeo			<i>Laurencia</i> sp.?
lipuupua, limu	Reed	88					<i>Valonia utricularis</i> Ag.

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
LIPU'UPU'U	Doty	4					<i>Dicypophatria finulosa</i> (Ag.) Dene.; <i>Laurencia</i> spp.; <i>Valonia utricularis</i> Ag.
lipu'upu'u	Keohokalole	Video: AM	Eaten with salt salmon.				
lipu'upu'u	Pukui	208	An edible green seaweed (<i>Valonia utricularis</i>), with turgid joints and short branches. Also kika-o-Kamapua'a.	kika-o-Kamapua'a, lipu'u	Also kika-o-Kamapua'a		
li-puu-puu, limu	MacCaughy 1917	142	Used by them (natives) for food.				<i>Valonia utricularis</i> Ag.
li-puu-puu, limu	MacCaughy 1917	153	A name used locally in certain districts on Hawai'i and Maui.				<i>Laurencia</i> spp.
LOLOA	Doty	5	(Maui, Kauai)				<i>Gelidium</i> : <i>Pterocladia capillacea</i> (Gmelin) Santelices et Hommersand; <i>Gelidium pusillum</i> (Stackh.) Le Jol.; <i>Gelidium amansii</i>
Loloa	Abbott 1947	204					<i>Gelidium</i>
loloa	Pukui	211	A seaweed (KL line 95), probably the same as limu loloa.	limu loloa?			
loloa	Setchell	107					Possibly <i>Gelidium amansii</i>
loloa	Bryan						<i>Gelidium</i>
lo-loa, limu	MacCaughy 1916	476	"the long or slender limu"				<i>Gelidium</i> sp.
loloa, limu	Reed	89	This species often called limu loloa on Maui and Kauai. Cooked with boiled meats long enough for the gelatin to be softened or dissolved.				<i>Pterocladia capillacea</i> (Gmelin) Santelices et Hommersand
loloa, limu	MacCaughy 1917	150	Extensively used as food.	limu ekaha-kaha			<i>Gelidium attenuatum</i> , <i>G. corneum</i> , <i>G. felicinum</i> (Bory) <i>G. intricatum</i> (J. Ag.) Kuetz., <i>G. latifolium</i> Born., <i>G. cartilagineum</i> (L.) Gaill., <i>G. pusillum</i> (Stackhouse) Le Jolis
loloa, limu	Reed	87	Grow quite near the tide line along shore, but on exposed black lava rocks in rough water. Cooked with boiled meats long enough for the gelatin to be softened or dissolved.				<i>Gelidium attenuatum</i> ?, <i>G. corneum</i> var.?, <i>G. latifolium</i> ? Born., <i>G. microperum</i> ?, <i>G. pulvinatum</i> ?, <i>G. pusillum</i> ? (Stackhouse) Le Jolis
loloa, limu	Pukui	207	Several species of edible red seaweeds (<i>Gelidium</i>), cylindrical or flattened, more or less pinnately branched, texture firm and smooth.		ānapanapa, ēkahakaha, kūwelu		<i>Gelidium</i>
loloa, limu	Neal						<i>Gelidium</i>

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
lolea, limu	Reed	87	Grow quite near the tide line along shore, but on exposed black lava rocks in rough water. Cooked with boiled meats long enough for the gelatin to be softened or dissolved.	limu ekahakaha			<i>Gelidium filicinum?</i> Bory
lolea, limu	MacCaughy 1917	150	Used by the natives of Kaua'i and Maui.				<i>Pterocladia capillacea</i> (Gmelin) Santelices et Hommersand
lua'u	Bryan						<i>Porphyra</i>
LU'AU	Doty	5					<i>Porphyra leucosticta</i> Thuret (Kauai)
LU'AU	Doty	5	(Maui)				<i>Polypores?</i>
li'au	Pukui	214	Same as limu li'au, a seaweed.	limu li'au			
luau, limu	Reed	88	Grow quite near the tide line along shore, but on exposed black lava rocks in rough water. Appears in winter or spring after heavy storms and last for only a few days. Washed in fresh water, salt added, put into clear water. Sometimes opihi is added and kept in jars for many weeks. Pounded to a pulp with salt and the juice is used to moisten bandages on cuts or bruises.	limu lipahee			<i>Porphyra leucosticta</i> Thuret
luau, limu	Reed	88	A single small specimen sent by native on Maui, similar to Porphyra.				<i>Polypores?</i>
lua'u, limu	MacCaughy 1917	149	A very highly prized delicacy.				<i>Porphyra leucosticta</i> Thuret
li'au, limu	Pukui	207	A red seaweed (<i>Porphyra</i> sp.), growing in the winter on boulders in exposed places, with delicate, thin blades appearing in groups. Best known on Kaua'i but known on all major islands. Also pahe'e or pahe'ehe'e.		Also pahe'e or pahe'ehe'e		<i>Porphyra</i> sp.
LUPE	Doty	5	(Chamberlain)				
lupe	Setchell	107				hihimanu or ray that was forbidden for women to eat also a fish.	
lupe, limu	Chamberlain	32					
maka	Pukui	224	A seaweed. See alani.		alani	varieties of sweet potato. See maka kila, maka koali, and maka nui	
MAKALOA	Doty	5	(Chamberlain)				
makalos	Pukui	227	A seaweed.				

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
makaloa	Setchell	108					
makaloa, limu	Chamborlain	32					
MAKE	Doty	5	ALANI (fide Setchell), a <i>Dictyota</i> ?				<i>Dictyota</i> ?
make	Setchell	108		limu alani			
make, limu	Henriques-Peabody	863					
make, limu	Kaina	Interview	Out Mwolea side.				
makua-o-ka-limu-kohu	Pukui	231	A seaweed. Lit., parent of the limu kohu.				
makua-o-ka-limu-kohu	Pukui	231	A seaweed. lit., parent of the limu kohu				
MANAIEA	Doty	5	ex Andrews Dictionary, = MANAUEA (Setchell)				
manaiea	Setchell	108		manauca, manauwea			
manaiea	Pukui	236	Same as manauca, a seaweed.	manauca			
MANAUEA	Doty	5					<i>Gelidium filicinum</i> Bory; <i>Gracilaria coronopifolia</i> J. Agardh
Manauca	Abbott 1947	206	Found in sandy, sheltered areas about the islands				<i>Gracilaria</i>
manauca	Magruder	73					<i>Gracilaria coronopifolia</i> J. Agardh
manauca	Ewaliko	Audio	Palupahu mai ko kākou manauca ma mua o ka ogo. 'Ōki'ōki e like me ka limu kohu. 'A' ohe maika'i ka mea pu'upu'u. Nānā 'oe i ka mea 'akahi nō a puau (?) mai i nima. Ki'i i ka mea hā'ula, maika'i 'Āina Haina.				
manauca	Kaulakou	Audio	Pakēpakē ke hou. Paluhē mai i ka wai wela.				
manauca	Hanaloa	Audio	'Ai 'ia, he mea ho'ohuihui.				

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
manauca	Henriques-Peabody	863					
manauca	Setchell	108		manaica, manauwea			<i>Gelidium filicinum</i> Bory
manauca, manauwea	Pukui	237	A small red seaweed (<i>Gracilaria coronopifolia</i>), with stiff, cylindrical, succulent stem and branches, a good alga for making food gels (XL line 53). The term may be qualified with pala kua, pahu, or puakea. Rarely manaica; often called "short ogo" and "long ogo" (Japanese dialect). Ogo or long ogo is <i>Gracilaria bursa-pastoris</i> .	manaica		taro variety	<i>Gracilaria coronopifolia</i> J. Agardh
manauca	Garmon	Interview	Recognized from picture in Magruder book.				
manauca	Anamizu	Interview	Kahuku Point still has a lot of manauca growing in the limestone depressions. If you're not going to eat it all, it can be preserved with some salt in a jar and refrigerated.				
ma-nau-ca, limu	MacCaughy 1917	151	Extensively used for food by the Hawaiians.				<i>Gracilaria coronopifolia</i> J. Agardh
manauca, limu	Neal						<i>Gracilaria coronopifolia</i> J. Agardh, <i>Gracilaria</i> spp.
manauca, limu	Abbott 1996	13	Cleaned in salt water, then in fresh water and chopped. Ho'ohui 'in me ka limu mane'one'o i kekahi manawa.				
manauca, limu	Abbott 1996	29	Over-fished.				<i>Gracilaria coronopifolia</i> J. Agardh
manauca, limu	Abbott 1996	12	Gelatinizes on heating, used in stews or in limu.				
manauca, limu	Pukui	208	See manauca.		See manauca		
manauca, limu	Reed	87	Found drifted on sand or rocks. Grow near the shore. Occasionally cooked in imu when there was famine or war and taro and sweet potatoes were scarce. Cooked with boiled meats long enough for the gelatin to be softened or dissolved. Substituted for limu huna when cooked with squid or octopus. Boiled with chicken to thicken broth. Sometimes used in inomona.				<i>Gracilaria coronopifolia</i> J. Agardh
manauwea	Setchell	95, 108	Eaten with fresh squid. "One day limu." Eaten cooked or raw.	manaica, manauca			<i>Gracilaria coronopifolia</i> J. Agardh
MANEONEO	Doty	5					<i>Laurencia obtusa</i> var. <i>rocmosa</i>
maneoneu	Henriques-Peabody	863					

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
maneoneo	Setchell	108	Keeps only one day.				<i>Laurencia obtusa</i> var. <i>racemosa</i>
mane'one'o	Magruder	81					<i>Laurencia nidifica</i> J. Agardh
mane'one'o	Pukui	238	An edible seaweed, <i>Laurencia nidifica</i>				<i>Laurencia nidifica</i> J. Agardh
ma-neo-neo, limu	MacCaughy 1917	153	For the shorter, coarser species.				<i>Laurencia</i> spp.
maneoneo, limu	Reed	87	Found drifted on sand or rocks. Iron rod is used to loosen sometimes. Pounded with salt and the juice is put on cuts or bruises.	limu elipepee, limu lipee			<i>Laurencia pinnatifida</i> (Gmel.) Lam.
maneoneo, limu	Neal						<i>Laurencia</i> spp.
maneoneo, limu	Reed	87	The several species of <i>Laurencia</i> are generally called limu maneoneo, if coarse or short, and limu lipeepee if finer and longer. Limu lipee is an abbreviation, while limu lipuupua has only local use in places on Hawaii and Maui. Found drifted on sand or rocks. Iron rod is used to loosen sometimes. Pounded with salt and the juice is put on cuts or bruises.	limu lipeepee			<i>Laurencia papillosa</i> (Forst.) Grev.
maneoneo, limu	Chamberlain	32					
maneoneo, limu	Reed	87	Found drifted on sand or rocks. Iron rod is used to loosen sometimes. Pounded with salt and the juice is put on cuts or bruises.	limu lipuupua			<i>Laurencia</i> sp.?
mane'one'o, limu	Abbott 1996	32	Young plants are more tender and has a sharper peppery taste.				<i>Laurencia nidifica</i> J. Agardh
MANU	Doty	5					<i>Chaetomorpha antennina</i> (Bory) Kützing
manu	Bryan						<i>Cladophora</i>
manu, limu	Reed	86		limu huluilio, limu ilio			<i>Chaetomorpha antennina</i> (Bory) Kützing
manu, limu	MacCaughy 1917	141		limu hulu-ilio, limu ilio			<i>Cladophora antennina</i> (Bory) Kütz.
MAUAUWEA	Doty	5	(misprint of MANAUWEA?) ex Chamberlain (Setchell)				
mauauwea	Setchell	108	Probably a misprint for limu manauwea.				

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
mauauwen, limu	Chamberlain	32					
maunaua	Simpson						
milwaewae	Pukui	243	A seaweed.				
milwaewae kīhuna	Pukui	243	The name of a seaweed.				
me-nau-ea	Bryan		(Icc Oahu, Kauai, Molokai)				<i>Gracilaria</i>
MENAUUA	Doty	5	(Kona, Oahu, Kauai, and Molokai)				<i>Gracilaria</i>
moa, limu	Pukui	207	Same as hulu moa, a seaweed.	hulu moa			
MOOPLUNA	Doty	5	KA-LIPOA; <i>Griffithsia ovalis</i> . Probably MO'OPUNA-A-KA-LIPOA.				<i>Griffithsia ovalis</i> Harv.?
mo'opuna	Pukui	254	Short for mo'opuna-a-ka-lipoa.	mo'opuna-a-ka-lipoa, aupūpū			<i>Griffithsia</i> sp.
mo'o-puna, limu	MacCaughey 1917	154	A very scarce species; used for food on Maui and southern Hawai'i.	limu ka-lipoa, limu au-pupu			<i>Griffithsia ovalis</i> Harv.?
moopuna, limu	Reed	87		limu ka-lipoa, limu aupupu			<i>Griffithsia</i> sp.?
moopuna, limu	Neal						<i>Griffithsia</i>
moopuna a ka lipoa	Henriques-Peabody	863					
mo'opuna-a-ka-lipoa	Pukui	254	A fine red seaweed (<i>Griffithsia</i> sp.), consisting of branching hairlike tufts; edible. Common in Ka'u and Kona, Hawai'i.	aupūpū, mo'opuna			<i>Griffithsia</i> sp.
moopuna-ka-lipoa, limu	Reed	66	Very perishable, must be cleaned in salt water and eaten soon after preparation. Sometimes are ripened by soaking in fresh water.				<i>Griffithsia</i> sp.?
mo'opuna-a-limu-kala	Abbott 1996	23	Clinging species of limu that is common on limu kala.				
MUALEA	Doty	5	rumored to be poisonous (Setchell).				

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
mualea	Setchell	108	Poisonous limu, curly and greenish. Placed on hot stones to melt and can be dried when it becomes reddish and more potent. Placed in Awa it would kill the drinker in 15 minutes. Grows in two places near Hana. Dried and powdered, put in tube of pili grass and blown onto person to be poisoned. Handled at lowtide when it is exposed, using sticks.				
nahawele	Pukui	258	Same as hula 'iio (Chaetomorpha antennina), a seaweed	hula 'iio		A bivalve of the family Isonomidae. Also mahawele. On O'ahu, the <i>Perna costellata</i> , <i>Atrina</i> sp.	<i>Chaetomorpha antennina</i> (Bory) Kutzing
nahawele	Henriques-Peabody	863					
naio	Pukui	259	Name of a seaweed.			bastard sandalwood (<i>Myoporum sandwicense</i>)	
nakeke	Pukui	259	A brown seaweed (<i>Hydroclathrus clathratus</i>), resembling pihā and closely related to it, but the surface pierced with holes of different sizes; not eaten.				<i>Hydroclathrus clathratus</i> (C. Agardh) Howe
NANEA	Doty	5					<i>Hypnea nidifica</i> J. Agardh
nanea	Pukui	261	A seaweed (<i>Hypnea nidifica</i>)			Same as mohihihi, a vine (<i>Vigna marina</i>)	<i>Hypnea nidifica</i> J. Agardh
nanea	Setchell	109					<i>Hypnea nidifica</i> J. Agardh
nanoo	Setchell	109					
NANO'O	Doty	5	(Chamberlain)				
nano'o	Pukui	262	A dark-red or purple seaweed, said to be same as nanea	nanea			<i>Hypnea nidifica</i> J. Agardh
nanoo, limu	Chamberlain	32					
NANUE	Doty	5	(Chamberlain)				
nanue	Pukui	262	An edible seaweed.			Var. of nenue, a fish.	
nanue	Setchell	109					
nanue, limu	Chamberlain	32					

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
NANUI	Doty	5					<i>Grateloupia filicina</i> (Lamouroux) C. Agardh
nunui	Setchell	109	Grows in Kohala, edible, much like lipoa. Also found on Maui				
nanui	Kaina	Interview	Looks like lipoa. It is also eaten. It has a stronger smell than lipoa and you can smell it when driving on Hāmua Road sometimes. It has seasons when it floats in and is eaten by the enene. When you cut the 'ōpi of the enene, you can rinse the insides and mix that limu (which is already chopped up for you) with the poke.				
nē	Pukui	263	A seaweed. (KL line 101.)				
NEHE	Doty	5					<i>Spirogyra</i> spp.
nehe	Pukui	264	Some kinds of pond scums (<i>Spirogyra</i> spp.), fine fresh-water algae, consisting of rows of single-celled filaments, each cell containing ribbon-shaped spirals. Also limu kala wai, lipala'ō, lipālāwai, pala'ō, pālāwai.		Also limu kala wai, lipala'ō, lipālāwai, pala'ō, pālāwai.		<i>Spirogyra</i> spp.
nehe, limu	Reed	88		limu palawai, limu polao			<i>Spirogyra</i> sp. (probably several)
nehe, limu	Pukui	207	Same as limu kalawai.	limu kalawai			
NEI	Doty	5					<i>Gymnogongrus vermicularis americana</i> J. Ag.; <i>Gymnogongrus disciplinalis</i> (Bory) J. Ag.
nei	Pukui	264	Same as kō'e'e'e, a seaweed, according to Reed 116, same as limu uaua loli.	limu uaua loli?	kō'e'e'e		
nei	Kaina	Interview	'Opihi limu, oldtimers eat with 'opihī (picked when dark). Smooth and crunchy.				<i>Ahnfeltiopsis flabelliformis</i> (Harvey) Masuda
nei, limu	Reed	87		limu uaua loli, limu ekaha-kaha, limu koelele or koele, limu awikiwiki			<i>Gymnogongrus vermicularis americana</i> J. Ag.; <i>Gymnogongrus disciplinalis</i> (Bory) J. Ag.
nei, limu	MacCaughy 1917	150		limu ua-ua-loli, limu ekaha-kaha, limu ko-ele-ele, limu awiki-wiki			
NOHOMAHE	Doty	5					<i>Chaetomorpha antennina</i> (Bory) Kützting
nohomabe	Setchell	109					<i>Chaetomorpha antennina</i> (Bory) Kützting
nu'a	Henriques-Peabody	863					

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
nu'a	Pukui	272	A kind of seaweed.				
OAOAKA	Doty	5	(Chamberlain)				
oaoaka	Setchell	109					
oaoaka, limu	Chamberlain	32					
ogo, limu	Ili	Video: 'AM	'Ohi i ka limu. Before, limu ogo was rubbish.				
ogo, limu	Keohokalole	Video: 'AM	Nui ma Kaula.				
ohiohio	Setchell	110					
'OHI' OHI' O	Doty	5	(Chamberlain)				
'ohi' ohi' o	Pukui	278	A seaweed.				
ohiohio, limu	Chamberlain	32					
ohune	Henriques- Peabody	863					
'ohune	Pukui	279	A kind of seaweed.				
okala	Setchell	110					<i>Galaxaura rugosa</i> (Ellis et Solander) Lamoureux
'OKALA	Doty	5					<i>Galaxaura rugosa</i> (Ellis et Solander) Lamoureux
'okala	Pukui	281	A rather small red seaweed (<i>Galaxaura rugosa</i>), regularly and densely branching the branches hollow and marked with rings; not edible. Also pākālākala (<i>Galaxaura</i> spp.)	kauno'a, kauna'on	Also pākālākala (<i>Galaxaura</i> spp.)	same as 'ōkolē, sea anemone perhaps	<i>Galaxaura rugosa</i> (Ellis et Solander) Lamoureux
OKUPE	Doty	5	(Chamberlain)				
okupe	Setchell	110					

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
okupe, limu	Chamberlain	32					
OLIPPEEPEE	Doty	5					<i>Laurencia pinnatifida</i> (Gmel.) Lam.
olipeepe, limu	Reed	87		limu maneono, limu lipce			<i>Laurencia pinnatifida</i> (Gmel.) Lam.
OOCHIEA	Doty	5	(Chamberlain)				
oohica	Setchell	110					
oohica, limu	Chamberlain	32					
oolu	Henriques-Peabody	863					
oolu	Setchell	110	Favorite about Honolulu.				<i>Laurencia obtusa</i> var. <i>racemosa</i> , <i>Hypnea nidifica</i> ? J. Agardh
'O'OLU	Doty	5					<i>Champia compressa</i> Harv.; <i>Chondria tenuissima</i> var. <i>intermedia</i> Grun.; <i>Laurencia obtusa</i> var. <i>racemosa</i>
'o'olu	Pakui	290	Two edible, fragile, red seaweeds (<i>Champia</i> sp. and <i>Chondria tenuissima</i>). They melt in fresh water, hence must be cleaned in sea water.			taro variety	<i>Champia</i> sp. and <i>Chondria tenuissima</i>
o-olu, limu	MacCaughy 1917	152					<i>Champia compressa</i> Harv.
o-olu, limu	MacCaughy 1916	478					<i>Chondria tenuissima</i>
o-olu, limu	MacCaughy 1917	153	Used for food.				<i>Chondria tenuissima</i>
ooh, limu	Reed	86	Grow near the shore. Very perishable, must be cleaned in salt water and eaten soon after preparation.				<i>Champia compressa</i> Harv., <i>Chondria tenuissima intermedia</i>
ooh, limu	Neal						<i>Champia compressa</i> Harv.
OPAI	Doty	6	(Chamberlain) Probably = 'OPAE.				
opai	Setchell	110					

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
opai, limu	Chamberlain	32					
'opihi limu	Ewaliko	Audio	Hiki nō ke 'ai.				
'opihi limu	Ah Quin	Interview	1) Green with clusters. 2) Long red.				
'opihi, limu	Kaalakea	Audio	Pupupu kona 'ano. Kuku 'o lalo.				
'opihi, limu	Ellis	Video: 'AM	'A'ole maopopo ka inoa maoli.				
ouri	Gaudichaud	148					<i>Sphaerococcus concinnus</i> (Brown ex Turner) C. Agardh
'owakawaka	Keohokalole	Video: 'AM	Type of limu.				
owakawaka	Ah Quin	Interview	Dark brown, lettuce like, brittle.				
PA'AKAI	Doty	6	HALE (Chamberlain); LIPAAKAI? ex Chamberlain, (fide Setchell)				
paakai	Setchell	110		lipaakai			
paakai, limu	Chamberlain	32					
pa'akai, limu	Pukui	207	Limu salted for indefinite storage without refrigeration. On Maui, usually limu lipa. See lipa'akai.		See lipa'akai		
PAKAIEA	Doty	6	(Chamberlain); PAKAJEA or Uwa? (Setchell)				Uwa?
paakaiea	Setchell	110		paakaiea			
paakaiea, limu	Chamberlain	32					
PACAYA	Doey	6					<i>Ulva linza</i> ; <i>Ulva compressa</i> ; <i>Solenia compressa</i>
pacaya	Gaudichaud	148					<i>Ulva linza</i> (<i>Ulva compressa</i>), (<i>Solenia compressa</i>)

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
PAHAPAHA	Doty	6					<i>Monostroma latissimum</i> Wittrock; <i>Ulva fasciata</i> Delile
pahapaha	Pukui	299	Same as lipahapaha, sea lettuce.	lipahapaha			<i>Ulva fasciata</i> Delile and <i>Monostroma oxyspermum</i> (Kützinger) Doty
pahapaha	Setchell	110	Kaua'i name for pakaioa (Hawai'i).				<i>Ulva fasciata</i> Delile, <i>Monostroma latissimum</i> Wittrock
pahapaha	Ewaliko	Audiot	Pae mai nō 'o ia, uluuli. 'Ai ka po'e kepani, 'oki'oki me ka soni a he aha lā.				
paha-paha, limu	MacCaughy 1917	138		limu pa-laha-loha			<i>Ulva fasciata</i> Delile
pahapaha, limu	Bryan						<i>Ulva</i>
pahapaha, limu	Reed	88	The three <i>Ulva</i> spp. seem to be indistinguishable by the natives, and the different islands and localities have various forms of the name, but limu pakoea is only in use on Hawaii. Grow near the shore. Dropped into hot soup or gravy as it is about to be served. Sometimes are ripened by soaking in fresh water. Tender tips are rubbed between fingers and small molluscs of a special kind is added with salt. Pounded and put on bruises.	limu palahaloha			<i>Ulva fasciata</i> Delile
pahapaha, limu	Neal						<i>Ulva</i> spp.
pahapaha, limu	Chamberlain	32					
PAHAPAHA-O-POLI	Doty	6	Hale (ex Chamberlain fide Setchell). Probably = PAHAPA-O-POLIHAE and named for a place on Kauai where it occurs.				
pahapaha o poli hale	Setchell	111					
pahapaha o Polihale	Abbott 1996	12	<i>Ulva fasciata</i> used as an adornment in hula, after the locality where it was used in western Kauai.				<i>Ulva fasciata</i> Delile
pahapaha-o-Polihale	Pukui	299	A kind of pahapaha said to be found only at Poli-hale, Kauai; after drying it was believed to revive when immersed in sea water; it was made into leis (FS 103.)				<i>Ulva</i> sp.
pahapaha o polihale, limu	Chamberlain	32					
pahapaha wai	Pukui	299	A sea lettuce (<i>Ulva</i> sp.) with narrow frond. Found where sea and fresh water meet.				<i>Ulva</i> sp.
pahee	Henriques-Peabody	863					

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
pahee	Setchell	111	Hawai'i name for lipahee. Eaten raw and put on cooked meat.	lipahee			
PAHE'E	Doty	6	(Hawaii) same as LIPAHEE (Setchell).				
pahe'e	Magruder	89					<i>Porphyra sp.</i>
pahe'e	Haanio	Audio	Ulu ma ka lue o Pāhe'ehe'e ka inoa. Ho'okahi ulu 'ana o ka makahiki.				
pahe'e	Pukui	299	Same as pāhe'ehe'e, a seaweed.	pāhe'ehe'e			<i>Porphyra sp.</i>
pahe'e	Germon	Interview	Recognized from picture in Magruder book.				
pahe'e, limu	Abbott 1996	23	Used with i'a lomi (raw fish?).	pāhe'ehe'e, li'au (Kaua'i)			<i>Porphyra spp.</i>
pāhe'ehe'e	Pukui	299	A green cushion shaped solid seaweed <i>Porphyra sp.</i> , formerly <i>Dictyosphaeria</i> . Also lipahe'e, lipahe'ehe'e, lipāhoe, pahe'e.		Also lipahe'e, lipahe'ehe'e, lipāhoe, pahe'e		<i>Porphyra sp.</i>
PAKA-EA	Doty	6					<i>Ulva lactuca lacinata</i> (Wulf.) J. Ag.
paka-ea	Bryan						<i>Ulva</i>
paka-ea, limu	MacCaughey 1917	138		limu lipa-laha-laha			<i>Ulva lactuca</i>
pakaea, limu	Reed	88		limu lipalahalaha			<i>Ulva lactuca lacinata</i> (Wulf.) J. Ag.
PAKAELEAWA	Doty	6	(Maui)—HULUHULUWAENA				<i>Grateloupia filicina</i> (Lamouroux) C. Agardh
pakaeleawa	Setchell	111	Maui name for huluhuluwaena (Hawai'i).	pakaeleawaa			
PAKA-ELE-AWA'A	Doty	6	Kauai, all but Hawaii (MacCaughey)				<i>Grateloupia filicina</i> (Lamouroux) C. Agardh
paka-ele-awa'a, limu	MacCaughey 1917	154	This name is used exclusively on Kauai. Both names are used on intermediate islands.	limu huluhuluwaena			<i>Grateloupia filicina</i> (Lamouroux) C. Agardh
pakaeleawaa, limu	Reed	87	Grow near the shore.	limu huluhuluwaena			<i>Grateloupia filicina</i> (Lamouroux) C. Agardh

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
PAKAIEA	Doty	6					<i>Ulva</i> spp. and <i>Monostroma</i> in general; <i>Ulva fasciata</i> Delile
pakaiea	Henriques-Peabody	863					
pakaiea	Setchell	111	Some say it is edible, others disagree.				<i>Ulva fasciata</i> Delile, <i>Monostroma</i> sp.
pakaiea	Pukui	304	Same as Iipahupaha, sea lettuce. Hawai'i			Same as halili'i, a variety of sugar cane; named for the seaweed, a variety of laro.	
pakaiea, limu	Abbott 1996	12	Relative of sea lettuce, early ancestor of shark 'aumakua was wrapped in pakaiea after birth and put into sea. Remnants of this garment is thought to be seen in the green sides of certain sharks. Shorter, broader, has irregular margins, lighter green in color than <i>U. fasciata</i> .				
pākalakala	Pukui	304	A coarse, non-edible seaweed (<i>Gelaxaura</i> spp.). Cf. kauno'a, 'ōkala, pākolekole, piliko'a	pākolekole	Cf. kauno'a, 'ōkala, pākolekole, piliko'a		<i>Gelaxaura</i> spp.
PAKELEAWEA	Doty	6	(ex Chamberlain) PAKELEAWAA? (Setchell).				
pakele-n-wa'a	Pukui	305	An edible seaweed. Also huluhulu waena.	huluhulu waena			
PAKELEAWAA	Doty	6	(Maui)				<i>Grateloupia filicina</i> (Lamouroux) C. Agardh
Pakeleawaa	Abbott 1947	206	(Maui)				<i>Grateloupia</i>
pakeleawaa	Setchell	111		pakeleawa			
pakeleawa'a	Sanborn	Audio	Limu planting. They did it. "Chop-chop" is taken on small stones. Don't uproot. Doesn't grow in rough water, likes sand. Grows at low tide, long. More 'ono at some places because of the spring water. If a woman is pe'a, 'a'ole hele i ka hana, haunā. 'A'ole kono i ke kai.				
pakeleawaa, limu	Chamberlain	32					
pakūpakū	Pukui	305	A seaweed. Also pakūpakū	pakūpakū	pakūpakū		
pākoā	Ewaliko	Audio	Pāhe'e loa. Ulu i luna o ka pōhaku a me ke one. Pafupafu, kōmū kilika.				

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
pūkolekole	Pukui	306	Same as pākakakala, a seaweed.	pākakakala			<i>Galaxaura</i> spp.
pakūpakū	Pukui	306	A seaweed. Also pakēpakē	pakēpakē	pakēpakē		
PALAHALAHA	Doty	6	PAKAIEA?				<i>Monostroma?</i> ; <i>Ulva fasciata</i> Delile or <i>Laurencia</i>
palahalaha	Bryan						<i>Ulva</i>
palahalaha	Setchell	111					<i>Ulva</i> sp., <i>Monostroma</i> sp., <i>Laurencia perforata</i> Mont.?
palahalaha	Magruder	33					<i>Ulva fasciata</i> Delile
pālahalaha	Pukui	307	Same as lipahapaha, a seaweed.	lipahapaha			<i>Ulva fasciata</i> Delile and <i>Monostroma oxyspermum</i> (Kützinger) Doty
pālahalaha	Garrison	Interview	Put into soup after you turn the fire off (recognized from picture in Magruder book).				
pālahalaha	Howard	Interview	She doesn't eat this limu but she knows some people eat it with shoyu (Japanese style).				
palahalaha, limu	Chamberlain	32					
pālahalaha, limu	Abbott 1996	17	Mix with huluhuluwaena.	pahapaha (young taro leaves), pakaia			<i>Ulva fasciata</i> Delile
pālahalaha, limu	Pukui	207	Same as pālahalaha 2	pālahalaha			
PALA-HALOHA	Doty	6					<i>Ulva fasciata</i> Delile
pa-laha-loha, limu	MacCaughey 1917	138		limu paha-paha			<i>Ulva fasciata</i> Delile
palahaloha, limu	Reed	88		limu pahapaha			<i>Ulva fasciata</i> Delile
pala'ū	Pukui	309	Same as līpālīwai, fresh-water algae	līpālīwai	Same as līpālīwai.		
PALAPAHAKOU	Doty	6					<i>Centroceras clavulatum</i> (C. Agardh) Montagne

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
palapahakou	Setchell	112					<i>Centroceras clavulatum</i> (C. Agardh) Montagne
palapohaku	Henriques-Peabody	863					
pala'ula	Pukui	310	A seaweed.				
palawai	Setchell	112	Looks like limu eleele but is not as coarse	limu lipalawai, limu palawai			
pālāwai	Pukui	311	Same as limu kala wai, pond-scums.	limu kalawai			
PALA-WAI	Doty	6	LI-PALA-WAI				<i>Stigeoclonium Falklandicum</i> Kuetz.; <i>Spirogyra</i> ; <i>Hydrodictyon reticulatum</i> (L.) Lagerh. and other green fresh water species; <i>Pithophora affinis</i> Nordst.
pala-wai	MacCaughy 1917	138	Sometimes used by them (natives) for food. The name is also applied to a number of other green fresh-water algae.				<i>Hydrodictyon reticulatum</i> (L.) Lagerh.
pala-wai, limu	MacCaughy 1917	139	Used by them (natives) for food.	limu li-pala-wai			<i>Stigeoclonium Falklandicum</i> Kuetz.
pala-wai, limu	MacCaughy 1917	143	A number of them are used by the natives for food.				<i>Spirogyra</i> spp.
pala-wai, limu	MacCaughy 1917	142		limu li-pala-wai			<i>Pithophora affinis</i> Nordst.
palawai, limu	Reed	88	Most all the edible green fresh-water algae are called lipalawai or polawaie, and there are perhaps a half dozen species in the mountain streams that are known by these names. Pounded with limu eleele and salt and tied on cuts and bruises.	limu lipalawai			<i>Pithophora affinis</i> ? Nordst. <i>Pithophora polymorpha</i> , <i>Stigeoclonium</i> sp.?
palawai, limu	Chamberlain	32					
palawai, limu	Reed	87	Pounded with limu eleele and salt and tied on cuts and bruises.				<i>Hydrodictyon reticulatum</i> (L.) Lagerh.
palawai, limu	Reed	88	Pounded with limu eleele and salt and tied on cuts and bruises.	limu nehe, limu polao			<i>Spirogyra</i> sp. (probably several)
pālāwai, limu	Abbott 1996	13	Freshwater or brackish water algae also eaten by mauka dwellers.	lipālāwai			
PALEWAWAE	Doty	6					<i>Laurencia</i> spp.
palewawae	Setchell	112	Young <i>Laurencia</i>				<i>Laurencia</i> sp.?

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
palewāwae	Pukui	312	Small, fan-shaped brown seaweeds (two species of <i>Padina</i> [<i>P. commersonii</i> , light-brown, and <i>P. vickersiae</i> , larger, darker-brown]), common on the reef, each fan more or less split and curled. Not eaten.			joy weed (<i>Alternanthera amoena</i>) from Brazil	<i>Padina commersonii</i> Bory, <i>P. vickersiae</i>
PAPAAKEA	Doty	6					<i>Liagora valida</i> Harvey
papaakea	Setchell	112					<i>Liagora valida</i> Harvey
pāpa'akea	Pukui	316	A seaweed (<i>Liagora valida</i>), related to puakī.				<i>Liagora valida</i> Harvey
pā'ū-o-Hi'iaka	Pukui	321	A kind of red seaweed with wide, thin thallus. Perhaps same as limu hā'ula.	limu hā'ula?		Jacquemontia sandwicensis, a variety of taro, good gray poi; a variety of sweet potato	
pā'ū-o-Hi'iaka	Pukui	321	Same as Iepe-o-Hina, a seaweed.	Iepe-o-Hina		Jacquemontia sandwicensis, a variety of taro, good gray poi; a variety of sweet potato	<i>Halymenia formosa</i> Harvey ex Kützting
peepee	Setchell	112	Maui name for aalaula. Lasts only one day.	aalaula			
PE'EPE'E	Doty	6	(Maui) AALAUULA (Hawaii)				<i>Codium Muellertii</i> Kuetzing
pe'epe'e	Pukui	322	Same as Iipe'epe'e, a seaweed. Maui.	Iipe'epe'e			
pe'epe'e, limu	Kaina	Interview	Grows in cracks, plenty down Maka'alae. Old kind has coral sometimes, so you shouldn't pick that one.				
PEHU	Doty	6	(Chamberlain)				
pehu	Pukui	323	A kind of seaweed.			A variety of sweet potato	
pehu	Setchell	112					
pehu, limu	Chamberlain	32					
pehu, limu	Kaina	Interview	Looks just like kōhu, except it flattens when taken out of the water. Doesn't have a strong smell like kōhu and it tastes hot. He knows of one guy that puts it in his stew to give it a hot flavor.				
PEPE-AHINA	Doty	6					<i>Halymenia formosa</i> Harvey ex Kützting
pepe-shina, limu	MacCaughy 1917	154	Rare.				<i>Halymenia formosa</i> Harvey ex Kützting

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
PEPE-IAO	Doty	6					<i>Amansia glomerata</i> Ag.; <i>Padina pavonia</i> (L.) Gaill.
pepeiao	Setchell	112		pilipiliko'a			<i>Padina pavonia</i> (L.) Gaill.
pepe-iao, limu	MacCaughy 1917	154		limu li-pepe-iao			<i>Amansia glomerata</i> Ag.
pepeiao, limu	Reed	86		limu lipepeiao			<i>Amansia glomerata</i> Ag.
pepciao, limu	Chamberlain	32					
pepeiao, limu	Pukui	207	Same as lipepeiao.	lipepeiao			
PEPEULU	Doty	6	(Chamberlain)				
pepeulu	Setchell	113					
pepeulu, limu	Chamberlain	32					
pilali	Pukui	329	A seaweed.				
piliko'a	Setchell	113					<i>Galaxaura lapidescens</i> (Soland) Lamx.
piliko'a	Pukui	330	A stiff kind of pākakala, a seaweed <i>Galaxaura lapidescens</i>)			Hawfish, variety of kō	<i>Galaxaura lapidescens</i> (Soland) Lamx.
PILILO'A	Doty	6					<i>Galaxaura lapidescens</i> (Soland) Lamx.
PILIPILIKO'A	Doty	6					<i>Padina pavonia</i> (L.) Gaill.
pilipiliko'a	Setchell	113		pepciao			<i>Padina pavonia</i> (L.) Gaill.
PIPIĻANA	Doty	7					<i>Enteromorpha</i>
PIPIĻANI	Doty	7	(Chamberlain)				

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
pipilani	Setchell	113					
pipilani	Pukui	332	Some kinds of green seaweeds (species of <i>Enteromorpha</i>). Maui. Also 'ele'ele.	'ele'ele	Also 'ele'ele.		<i>Enteromorpha</i>
pipilani, limu	Reed	86, 87	On Maui it is sometimes called limu pipilani	limu elele			<i>Enteromorpha flexuosa</i> (Wulfen) J. Agardh <i>E. hopkirkii</i> Ag. <i>E. intestinalis</i> (Linnaeus) Link <i>E. linza</i> (Linnaeus) J. Agardh <i>E. plumosa</i> (Muller) J. Agardh <i>E. prolifera</i> var. <i>tubulosa</i> Kuetz., <i>E. prolifera</i> (Muller) J. Agardh
pipilani, limu	Chamberlain	32					
POHĀ	Doty	7					<i>Hydroclathrus cancellatus</i> Bory
poha	Magruder	47					<i>Hydroclathrus clathratus</i> (C. Agardh) Howe
poha	Setchell	113	Eaten raw by natives.				<i>Hydroclathrus cancellatus</i> Bory
pohā	Pukui	334	Same as pohāpohā.	pohāpohā, līpohāpohā		cape gooseberry = pa'ina (Hawai'i)	<i>Dictyosphaeria cavernosa</i> (Forsk.) Borgesen
pohāpohā	Pukui	335	A non-edible, green seaweed <i>Dictyosphaeria cavernosa</i> , small, round, hollow, that bursts with a pop when stepped on. Also līpohāpohā, pohā.	līpohāpohā, pohā	Also līpohāpohā, pohā.	"running pop" <i>Passiflora foetida</i>	<i>Dictyosphaeria cavernosa</i> (Forsk.) Borgesen
POLAO	Doty	7					<i>Spirogrva</i> spp.
polao, limu	Reed	88		limu palawai, limu nehe			<i>Spirogrva</i> sp. (probably several)
PUAKI	Doty	7					<i>Liagora decussata</i> Mont.
puaki	Pukui	346	A red seaweed (<i>Liagora decussata</i>), somewhat calcified but flexible, branched; not edible; related to pāpa'akea				<i>Liagora decussata</i> Mont.
pu-aki, limu	MacCaughy 1917	149	Considered edible.				<i>Liagora decussata</i> Mont.
puaki, limu	Reed	87	Grow near the shore.				<i>Liagora decussata</i> Mont.
PUALU	Doty	7					<i>Polysiphonia mollis</i> Hooker et Harvey ex Harvey 1847

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
pu-ahu, limu	MacCaughy 1917	154	It is not popular, and it is used by but few natives for food.	limu hawane			<i>Polysiphonia mollis</i> Hooker et Harvey ex Harvey 1847
puahu, limu	Reed	88	Used by but few Hawaiians for food; not popular	limu hawane			<i>Polysiphonia mollis</i> Hooker et Harvey ex Harvey 1847
PŪHĀ	Doty	7					<i>Colpomenia sinuosa</i> (Roth) Derbes et Solier
puha	Setchell	113					<i>Colpomenia sinuosa</i> (Roth) Derbes et Solier
puha	Magruder	39					<i>Colpomenia sinuosa</i> (Roth) Derbes et Solier
puha	Gannon	Interview	Seasonal limu that likes water flow (recognized from picture in Magruder book).				
pūhā	Pukui	348	A brown seaweed (<i>Colpomenia sinuosa</i>), cushion-shaped, hollow, surface smooth and un-even, not eaten. Cf. nakeke.		Cf. nakeke		<i>Colpomenia sinuosa</i> (Roth) Derbes et Solier
pūbuluhulu	Pukui	350	Same as hulu 'Ōio (<i>Centroceras clavatum</i> & <i>Ectocarpus</i> spp.), seaweeds.	hulu 'Ōio			<i>Centroceras clavatum</i> & <i>Ectocarpus</i> spp.
pupukanelio	Setchell	113					
pupukanelio, limu	Chamberlain	32					
PUPUKANELIO	Doty	7	(Chamberlain)				
RIMOU	Doty	7	<i>Les algues marines et fluviales</i> (Gaudichaud).				
Rimon	Gaudichaud	148	<i>les algues marines et fluviales</i>				
RIMOU-KALA	Doty	7					<i>Sargassum cune-folium et aquifolium</i>
rimou-kala	Gaudichaud	148					<i>Sargassum cuneifolium et aquifolium</i>
RIMU	Doty	7	Tahitian, Tuamotu, and Maori name for algae and similar substances.				
turtle limu	Kaina	Interview	Green limu that grows down Hāna Bay.				

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
turtle limu	Diego	Interview	Red with leaves, skinny on bottom and branching on top, smooth. Also called enenue limu				
uasua loli	Pukui	362	See limu uasua loli.		limu uasua loli		
UAUALOLI	Doty	7					<i>Gymnogongrus vermicularis americana</i> J. Ag.; <i>Gymnogongrus disciplinatus</i> (Bory) J. Ag.
uasualoli	Setchell	113					
ua-ua-loli, limu	MacCaughy 1917	150		limu ekaha-kaha, limu ko-ele-ele, limu swiki-wiki, limu nei			<i>Gymnogongrus vermicularis</i> , <i>G. americana</i> , <i>G. disciplinatus</i> J. Ag.
uasua loli, limu	Pukui	207	Same as 'Ekahakaha, a seaweed.	'Ekahakaha, limu uasua loli			
uasualoli, limu	Reed	87	This limu is usually called limu uasualoli, but the other names are used in certain localities. Grow far out on the coral reefs or on exposed rocks in the surf. Grow quite near the tide line along shore, but on exposed black lava rocks in rough water. Iron rod is used to loosen sometimes. Occasionally cooked in imu when there was famine or war and taro and sweet potatoes were scarce. Cooked with boiled meat long enough for the gelatin to be softened or dissolved. Finely pounded, it is sometimes mixed with salt and small limpets. Gonads of sea urchins are sometimes mixed with this limu.	limu ekahakaha, limu koelele or koele, limu swikiwiki, limu nei			<i>Gymnogongrus vermicularis americana</i> J. Ag.; <i>Gymnogongrus disciplinatus</i> (Bory) J. Ag.
uasualoli, limu	Chamberlain	32					
'ula, limu	Kapahulehua	Interview	Red, looks like Ipoua.				
ULAULA	Doty	7	(Chamberlain)				
ulaula	Setchell	113					
ulaula, limu	Chamberlain	32					
uncle	Henriques-Peabody	863					
upi	Henriques-Peabody	863					

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
WAWAEIOLE	Doty	7					<i>Codium Muellieri</i> Kuetzing (Hawaii)
wawaeiole	Setchell	113		salasalo			<i>Codium Muellieri</i> Kuetzing
wāwae'iole	Magruder	25					<i>Codium edule</i> Silva
wāwae'iole	Pukui	382	Other analysts call wāwae'iole, <i>Codium edule</i> , and list 'a'ala-ula and 'ala'ula as variant names. Some equate huluhulu-a- iole and huhu'iole with wāwae'iole		Also huluhulu-a- iole and huhu'iole		<i>Codium edule</i> Silva
wāwae'iole	Ewaliko	Audio	Ala nō i waho. 'A'ole makomake i ka mea pae mai. Kī i i ka mea, aia nō ma laila 'A'ole maika i ka mea nunui loa, ka mea makali i mai nō. 'O ka mea makali i ma ka mea hehu 'ekahi. Pipili i ka 'ako'ako'a. "Hana 'oe me ka ma'ema'e, 'ai nō 'oe me ka ma'ema'e, 'a'ole kīpulu." Lawe i kīlani kai a hō'okomo ka wāwae'iole, mau nō ke kō'i'i, 'a'ole palupala. Palupala i ka wai maoli. Inā 'a'ole kai, pa'akai, kōpi a miko.	'a'ala'ula			
wāwae'iole	Kaina	Interview	Hāna mustly has the kind that lies flat on the rocks, not the one that branches upright from the sand and sways.				
wāwae'iole	Garmon	Interview	Recognized from picture in Magruder book.				
wawae-iole, limu	MacCaughy 1917	142	This species is called limu a-ala-ula and also on Hawai'i, limu wawae-iole and wawae-moa	limu a-ala-ula, limu wawae-moa			<i>Codium Muellieri</i> Kuetzing
wawae-iole, limu	MacCaughy 1916	476	"the mouse-foot limu"				<i>Codium Muellieri</i> Kuetzing
wawaeiole, limu	Reed	86		limu aallaala, limu wawaimoa			<i>Codium Muellieri</i> Kuetzing
wawaeiole, limu	Simpson						
wawae'iole, limu	Keobokalo	Video: AM	Has at Hau'ula.				
wāwae'iole, limu	Abbott 1996	13, 18	Cleaned in salt water, then in fresh water and pounded. Add salt. Ho'ohui 'ia me ka lipo'epe'e i kekahi manawa.	Ala'ula, 'a'ala'ula (Maui) & 'ala (Kaua'i) for prepared limu, huhu'iole (obsolete), wāwaimoa (obsolete)			<i>Codium edule</i> Silva
WAWAE-MOA	Doty	7					(Hawaii) <i>Codium Muellieri</i> Kuetzing
wawae-moa, limu	MacCaughy 1917	142		limu wawae-iole limu a-ala-ula			<i>Codium Muellieri</i> Kuetzing
WA-WAHI-WA'A	Doty	7					<i>Chomospora fastigata pacifica</i> J. Ag.

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LIMU NAME	SOURCE	PAGE	INFORMATION	SYNONYMS	SEE ALSO	SHARED NAMES	LATIN NAMES
wawahiwaa	Seichell	113					
wawahiwaa	Henriques-Peabody	863					
wāwahiwa'a	Pukui	382	Same as kaupou, a seaweed.	kaupou		Borer that bores into canoe hulls, a teredo.	<i>Chnoospora pacifica</i> J. Agardh
wa-wahi-wa'a, limu	MacCaughey 1917	148	Used by them (natives) for food.	limu kau-pau			<i>Chonospora fastigiata pacifica</i> J. Agardh
wawahiwas, limu	Reed	86		limu kaupau			<i>Chnoospora fastigata pacifica</i> J. Ag.
wawahiwas, limu	Chamberlain	32					
wawaimoa, limu	Reed	86		limu sallaula, limu wawasiote			<i>Codium Muellieri</i> Kuetzing

Appendix B: List of Limu Names

l.aaki	hulu ii	kuwelu***
aalaula*	hulu manu***	laau kanaka***
aalii	hulu moa***	lehelehe ilio***
ai-a-ka-honu***	hulu puaa***	lepe-o-Hina*
akaakoa***	hulu ilio***	lepelepe-o-Hina
akala***	hulu wawae-iole	lepeahina*
akiaki*	huna***	leponalo
akiula	hune	likolehua
akoakoa	hunehune***	limanamana***
akuila***	hupekohola	limoa***
alaaula***	huwae	lipaikai*
alani*	ihau	lipaha***
alaula	ii	lipahapaha
alolo***	iliau**	lipahapala
anapanapa***	ilio	lipahee*
apeepee***	iliohaa***	lipaheehee
aupupu***	kahakala	lipahoe***
awaawa	kahili**	lipakai
awikiwiki***	ka-kanaka*	lipalahalaha*
ehau	kala*	lipalao***
ekaha***	kalalauliilii*	lipalawai***
ekahakaha	kalalaunuinui*	lipalu***
eleau**	kalawai***	lipaoaoa***
eleele*	kalipoa	lipee*
eleele-kai	kanaloa***	lipeepee*
eleele maoli*	kaunaoa***	lipehe*
eloelo	kaunoa	lipehu
elula	kaupau***	lipepe***
hana***	kekuwelu	lipepeiao
haua***	kele	lipewale
haulelani***	kihe***	lipoa*
hawane***	kikala	lipohapoha***
hinakea***	kiki	lipupu
hinaula***	kimau	lipuu***
holoawai***	kipa-akai	lipuula
holomoku	koele**	lipuupuu
hona	koeleele	loloa*
honu***	kohu*	luau*
hoonunu***	koiale	lupe
huahuakai***	koko*	maka***
huai***	koloa	makaloa
hulu***	kukae-o-Kamapuaa***	make*
huluhulu***	kukaepueo	make-o-Hana*
huluhuluwaena*	kulapepeiao***	makua-o-ka-limu-kohu***
huluhulu wahine	kumulimukala	manaiea
huluhulu-a-iole***	kumulipoa	manauea*

* Limu names that have been associated with actual limu through previous studies.

** Limu names that have been associated with actual limu through this study.

*** Limu names that have information but the association with actual limu has not been documented.

Appendix B: List of Limu Names

maneoneo*	pakalakala***
manu	pakeleawaa
mauauwea	pakepake***
mawaewae	pakoa***
mawaewae kilihune	pakolekole***
menauea	pakupaku***
moa	palahalaha*
moopuna***	palahaloha
moopuna-a-ka-lipoa***	palapahakou
moopuna-o-limu-kala***	palapohaku
mualea*	palao
nahawelee***	palaula
naio	palawai
nakeke***	palewawae***
nanea***	papaakea***
nanoo***	pau-o-Hiika***
nanue***	peepee*
nanui	pehu**
ne	pepe-ahina
nehe***	pepeiao
nei**	pepe-o-Hina
nohomahe	pepeulu
nua	pilali
oaoaka***	pilikoa***
ohiohio	pilipilikoa
ohune	pipilana
okala***	pipilani***
okupe	poha***
olipeepee	pohapoha
oohiea	polao
oolu*	puaki***
opai	pualu***
opihi***	puha***
ouri	puhuluhulu***
owakawaka	pupukaneilio
paakai*	rimou-kala
paakaiea	uaualoli***
pacaya	ula***
pahapaha	ulaula
pahapaha-o-Polihale***	unele
pahapaha wai***	upi
pahee*	wawaeiole*
paheehee	wawaemoa
paka-ea	wawaimoa
pakaeleawaa*	229.wawahiwaa***
pakaiea*	

* Limu names that have been associated with actual limu through previous studies.

** Limu names that have been associated with actual limu through this study.

*** Limu names that have information but the association with actual limu has not been documented.

Appendix C: Personal Information Sheet

Personal Information from the people who talked to me about limu.

Full Name: _____

Date of Birth: _____

Place of Birth: _____

Address: _____

Phone Number: _____

Where you were brought up: _____

Occupation/what you do (fish, farm, etc.): _____

Who taught you about limu?

Where this person (these people) is/ are from?

If you had to put an origin on where your knowledge about limu is from, where would that be? (South Kona, Kihei, Hana, etc.)

Appendix D: List of Voucher Specimens

LIMU NAME	SOURCE	VOUCHER NUMBER	LATIN NAMES
limu kohu	Kaina	KA002LIMU	<i>Asparagopsis taxiformis</i> (Delile) Trevisan
nei	Kaina	KA028LIMU	<i>Ahnfeltiopsis flabelliformis</i> (Harvey) Masuda
iliau	Kaina	KA034LIMU	<i>Ahnfeltiopsis concinna</i> (J. Agardh) Silva et DeCew
limu manaua	Anamizu	KA059LIMU	<i>Gracilaria coronopifolia</i> J. Agardh
wāwae`iole	Kaina	KA060LIMU	<i>Codium arabicum</i> Kützinger
limu kohu	Howard	KA061LIMU	<i>Asparagopsis taxiformis</i> (Delile) Trevisan
limu `ele`ele	Howard	KA062LIMU	<i>Enteromorpha prolifera</i> (Muller) J. Agardh
limu pālahalaha	Howard	KA063LIMU	<i>Ulva fasciata</i> Delile
kō`ele`ele, kō`ele	Howard	KA064LIMU	<i>Ahnfeltiopsis flabelliformis</i> (Harvey) Masuda
limu huluhuluwaena	Howard	KA065LIMU	<i>Grateloupia filicina</i> (Lamouroux) C. Agardh
limu kala	Howard	KA066LIMU	<i>Sargassum echinocarpum</i> J. Agardh
limu `aki`aki	Howard	KA067LIMU	<i>Ahnfeltiopsis concinna</i> (J. Agardh) Silva et DeCew
līpe`epe`e	Howard	KA068LIMU	<i>Laurencia</i> sp.

Appendix E: Supplemental Information - Audio Recording References

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Appendix E: Supplemental Information - Audio Recording References

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Appendix E: Supplemental Information - Audio Recording References

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- Kawelo, Hilda Hoohila Manuia. 1963. Mary Kawena Pukui
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- Keawe, David. Ka Leo Hawai'i. University of Hawai'i at
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Appendix E: Supplemental Information - Audio Recording References

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